X

ANNUAL

ADMINISTRATION REPORTS

OF

THE FOREST DEPARTMENT

(SOUTHERN AND NORTHERN CIRCLES),

MADRAS PRESIDENCY,

FOR THE

OFFICIAL YEAR

1888-89.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.
1889.

107

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE SOUTHERN CIRCLE, MADRAS,

FOR THE YEAR 1888-89.

By A. W. PEET, Esq., Acting Conservator of Forests.

CHAPTER I.

Introductory Remarks.

Colonel I. Campbell Walker, Conservator of Forests of the Circle, went on furlough, giving over charge on 19th April 1888 to Mr. J. W. Cherry, who acted as Conservator until he was relieved by Mr. A. W. Peet on 8th March 1889.

Mr. Cherry visited during the year the Chingleput, North Arcot, South Arcot and Coimbatore districts. His inspection notes were sent to Collectors and the Board of Revenue as usual.

Mr. Peet visited Madura, Tinnevelly and South Arcot. He inspected the District Forest offices. There was no field inspection, but several subjects requiring personal discussion received attention.

The inspection of Range offices by District Forest Officers received during the year better attention than in former years.

2. The time spent in camp by the District Forest Officers during the year is reported to have been as follows:—

Abstract A.—Movements of District Officers.

Districts.	Name of officer in charge.	Number of days in charge.	Number of days spent in camp.	Percentage of time spent in camp.	Reasons for absence from charge of permanent officers.
Chingleput	Mr. T. Muhammad Ali, Khan Sahib.	365	152	41·6	
North Arcot	,, T. Sheffield	365	186	50 9	
South Arcot	,, H. L. Wooldridge ..	284	86	30·0	Privilege leave up to 20th May 1888. Died on 27th Feb. 1889.
Do. .. .	,, C. Eber Hardie (Acting) ..	49	20	40·8	
Do.	,, C. P. Howell (Acting) ..	32	15	46·9	
Salem	,, J. W. Cherry	16	..	..	Promoted to act as Conservator.
Do.	,, C. P. Howell (Acting) ..	38	11	29·0	
Do.	,, E. D. M. Hooper	311	179	57·6	
Trichinopoly	,, A. W. C. Stanbrough ..	35	..	..	Furlough, May 1888.
Do.	,, C. Somers Smith	57	..	..	Furlough, July 1888.
Do.	,, C. Eber Hardie (Acting) ..	273	144	52·7	
North Coimbatore	,, W. C. Hayne	365	186	50·9	
South Coimbatore	,, V. S. Gurunada Pillai (Acting.)	67	24	35·8	
Do.	,, H. J. A. Porter	298	187	62·7	Privilege leave.
Madura	,, H. A. Gass	357	238	66·7	Do.
Do.	Treasury Deputy Collector ..	8	..	..	
Tinnevelly	Mr. C. E. Brasier	365	207	56·7	
North Malabar	,, R. W. Morgan	365	221	60·5	
South Malabar	,, G. Hadfield	317	174	54·9	Privilege leave from 12th February 1889.
Do.	,, A. G. Van-Haften (Acting)	48	..	..	
South Canara	,, T. P. Peake	365	183	50·1	
	Total ..	4,380	2,213	50·5	

The average time in camp was a little over half the time in charge.

CHAPTER II.

AREAS AND BOUNDARIES.

3. *Areas.*—The following abstract exhibits the changes which took place during the year in the various classes of State forests :—

ABSTRACT B.—Classes of Forest.

Class of forests.	Area on 31st March 1888.	Added during the year 1888-89.	Excluded during the year 1888-89.	Difference.	Area on 31st March 1889.	Source or cause of increase or decrease.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
A. Reserved forests under Act V.	2,402	408	10	+ 398	2,800	375 square miles from D. Added 33 and excluded 10 square miles owing to rectification of areas.
B. Reserved forests under previous rules.	244	..	50	— 50	194	50 square miles to D.
C. Leased forests	..	..	..	..	..	
D. Reserved lands	5,153	538	393	+ 145	5,298	50 square miles from B; 166 square miles from E. 310 square miles from F; 12 square miles added by rectification of areas. 375 square miles to A; 18 square miles deducted by rectification of areas.
E. Other forests	1,250	368	166	+ 202	1,452	368 square miles from F; 166 square miles to D.
F. Unclassed forests and waste lands.	..	..	..	..	..	
Total ..	9,049	1,314	619	+ 695	9,744	

Leased forests.—Forty-six square miles remain included in other classes as explained in para. 3 of the last annual report.

The large addition to "E. Other forests" is due to areas selected in Salem for notification under section 4 to complete proposals for reservation, having been included in that return.

It has not yet been ascertained *in detail* what extent of "unclassed forests and waste lands" or unreserved lands still remain and what portion of them is covered with forest.

4. The following abstract may, however, serve to indicate in a manner the progress already made in the reservation of forests and what may hereafter be expected :—

ABSTRACT C.—District areas and Forest reserves in square miles.

District.	District surveyed area as per Board's Proceedings, dated 6th Nov. 1888, No. 629 (Settlement, Land Records and Agriculture).	DISTRICT AREA, HOW COMPOSED.				
		Occupied land of all classes.			Unoccupied or lands at the disposal of Government.	
		Cultivated.	Uncultivated.		Forest.	Bare.
			Forest.	Bare.		
1	2	3	4	5	6	7
Chingleput	2,840	1,157	25	553	210	895
North Arcot	7,497	2,435	1,000	1,557	911	1,594
South do.	5,140	1,907	83	383	1,068	1,639
Salem	7,724	2,436	508	1,157	2,226	1,397
Trichinopoly	4,732	2,439	237	1,036	326	694
Tanjore	3,740	2,069	10	851	65	745
North Coimbatore	7,860	4,088	21	260	2,538	953
South do.						
Madura	8,799	4,324	500	2,285	699	991
Tinnevelly	5,391	2,637	131	1,346	607	670
North Malabar	5,588	1,371	5	24	943	3,245
South do.						
South Canara	3,902	587	2	55	1,758	1,500
Total ..	63,213	25,510	2,522	9,507	11,351	14,323

District.	Lands at the disposal of Government how classed.				Total of forest reserves.	Percentage of forest reserves to district area.	Percentage of forest reserves to land at disposal of Government.
	Unreserved lands.	Reserved lands.	Reserved lands under settlement.	Reserved forests.			
	8	9	10	11	12	13	14
Chingleput	952	22	*39	92	153	5·39	13·85
North Arcot	1,594	178	364	369	911	12 15	36·37
South do.	2,424	..	189	94	283	5·51	10·45
Salem	2,455	202	368	598	1,168	15·12	32·24
Trichinopoly	784	39	61	136	236	4·99	23·13
Tanjore	785	6	11	8	25	·67	3·09
North Coimbatore	955	1,176	657	119	2,530	32·26	72·65
South do.		18		566			
Madura	1,127	63	173	327	563	6·39	33·31
Tinnevelly	687	1	302	287	590	10·94	46·20
North Malabar	3,580	20	143	118	608	10·88	14·52
South do.		28	260	39			
South Canara	2,233	881	97	47	1,025	26·27	31·46
Total ..	17,576	2,634	2,664	2,800	8,098	12·81	31·54

We have added during the year 398 square miles of reserved forests and 145 square miles of reserved lands, bringing the total reserves up to 8,098 square miles, which is nearly 13 per cent. of the district areas and 32 per cent. of the "lands at the disposal of Government."

Coimbatore exceeds the average considerably; but, as explained in the previous report, all the reserved land area which may remain after selecting compact and suitable blocks to be constituted reserved forests will be unreserved.

Tinnevelly, which comes next, will have no further addition—*vide* G.O., 23rd May 1889, No. 422.

In North Arcot and Madura, there is no likelihood of any further addition at present, though in *Salem*, an increase of about 460 square miles is still expected, which will raise the percentage from 32 to 44. It is however doubtful, as remarked lately by the Board, whether Government will sanction the whole of the proposed extensions.

In South Canara, it has already been reported that the present extent of forest under control is ample for all requirements.

In Trichinopoly, the probable addition may be entered at about 65 square miles, which will raise the percentage from 23 to 30.

In Malabar, no further addition appears possible at present.

In South Arcot, a large area (about 785 square miles) has still to be added to "reserves" and the percentage will probably rise to 39.

In Chingleput, there is not apparently much to add. In the Saidápet taluk alone, about 96 square miles of unassessed waste are found to be quite unsuitable for reservation, they being either bare sandy wastes or swamps along the Buckingham canal. The District Forest Officer expects, however, to select a further area of about 14 square miles in the Ponnéri taluk, which will raise the percentage to 15.

In Tanjore, the addition may be reckoned at about 40 square miles, which will raise the percentage to 8.

From the above notes it will be gathered that the contemplated addition to existing "reserves" is about 1,364 square miles. The reserve total will then be about 9,462 square miles for the Circle, or, say, 9,500 square miles (in round numbers), which is about 15 per cent. of district areas including inam, zemin, and feudatory states and 37 per cent. of "lands at the disposal of Government." There is apparently an ample margin for the constitution of areas as village forests as contemplated.

5. *Reserved forests*—(See appendix 59-A).—The area constituted reserved forests up to date is as follows :—

ABSTRACT D.—Reserved Forests in square miles.

District	Up to 1887-88.	During 1887-88.	During 1888-89.	Total.
Chingelput	63	24	5	92
North Arcot	195	..	174	369
South do.	3	59	32	94
Salem	171	388	39	598
Trichinopoly	31	13	92	136
Tanjore	..	..	8	8
North Coimbatore	99	..	20	119
South do.	566	..	..	566
Madura	288	16	23	327
Tinnevelly	287	..	..	287
North Malabar	118	..	..	118
South do.	15	24	..	39
South Canara	2	40	5	47
Total ..	1,838	564	398	2,800

The total area of "reserved forests" is now 4·43 per cent. of the district surveyed areas. The largest addition to this class was made in the North Arcot district; Trichinopoly comes next.

6. *Reserved lands under settlement* (included in appendix 59-D).—The following abstract shows the progress of settlement, in blocks and square miles:—

ABSTRACT E.—Forest Settlement.

District.	Under settlement up to 1887-88.		Added during 1887-88.		Added during 1888-89.		Total under settlement.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9
Chingleput	20	98	10	15	17	18	47	131
North Arcot	37	369	46	314	2	50	85	733
South do.	52	220	18	14	15	49	85	283
Salem	76	697 (* — 2)	18	111	12	160	106	966
Trichinopoly	41	179 († — 1)	..	..	33	19	74	197
Tanjore	3	7	17	12	4	..	24	19
North Coimbatore	6	99 († + 20)	2	470	2	187	10	776
South do.	9	566	..	..	1	..	10	566
Madura	76	382 (‡ — 2)	14	108	4	12	94	500
Tinnevelly	10	539	29	50	..	..	39	589
North Malabar	13	261	..	..	..	..	13	261
South do.	6	40 († — 1)	10	19	5	241	21	299
South Canara	20	106 († + 7)	1	28	1	3	22	144
Total ..	369	3,563 (+ 21)	165	1,141	96	739	630	5,464

District.	Finally settled up to 1887-88.		Finally settled during 1887-88.		Finally settled during 1888-89.		Total finally settled.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	10	11	12	13	14	15	16	17
Chingleput	11	63	3	24	3	5	17	92
North Arcot	33	195	..	..	5	174	38	369
South do.	1	3	13	59	8	32	22	94
Salem	25	171	37	388	4	39	66	598
Trichinopoly	14	31	7	13	10	92	31	136
Tanjore	..	..	2	..	14	8	16	8
North Coimbatore	6	99	..	..	..	20	6	119
South do.	9	566	..	..	..	..	9	566
Madura	68	288	3	16	2	23	73	327
Tinnevelly	5	287	..	..	..	..	5	287
North Malabar	6	118	..	..	..	..	6	118
South do.	5	15	1	24	..	..	6	39
South Canara	6	2	2	40	5	5	13	47
Total ..	189	1,838	68	564	51	398	308	2,800

* Cut out at settlement. † Rectification of area by Survey, &c. ‡ Unreserved, &c.

7. The progress of the balance still under settlement is shown in the following abstract :—

ABSTRACT F.—State of settlement balance.

District.	Of those notified in 1884-85.		Of those notified in 1885-86.		Of those notified in 1886-87.		Of those notified in 1887-88.		Of those notified in 1888-89.	
	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
1	2	3	4	5	6	7	8	9	10	11
Chingleput	..	..	..	..	5	9	8	12	17	18
North Arcot	..	..	..	..	..	..	45	314	2	49
South do.	..	..	11	97	19	29	18	14	15	50
Salem	9	74	1	16	1	8	18	111	11	159
Trichinopoly	..	..	3	3	7	39	..	..	33	19
Tanjore	..	..	..	..	1	7	3	4	4	..
North Coimbatore ..	..	..	..	..	..	..	2	470	2	187
South do. ..	..	..	..	..	..	..	..	..	1	..
Madura	..	..	..	..	4	59	13	102	4	12
Tinnevelly	..	..	5	252	..	..	29	50	..	..
North Malabar	3	103	3	40	1	..	..	..	..	..
South do.	..	..	..	..	..	..	10	19	5	241
South Canara	..	..	2	35	5	24	1	35	1	3
Total ..	12	177	25	443	43	175	147	1,131	95	738

District.	Total balance.		Remarks on the balance.					
			Settled and reported on.		Settled but not reported on.		Settlement proceeding.	
	Blocks	Area.	Blocks.	Area.	Blocks.	Area.	Blocks.	Area.
	12	13	14	15	16	17	18	19
Chingleput	30	39	18	25	12	14	..	..
North Arcot	47	364	45	314	2	50	..	..
South do.	63	189	48	140	..	..	15	49
Salem	40	368	22	156	18	212	..	..
Trichinopoly	43	61	12	42	31	19	..	..
Tanjore	8	11	4	11	4	..	..	..
North Coimbatore	4	657	..	..	..	..	4	657
South do.	1	..	1	..	..	..	..	..
Madura	21	173	16	152	4	21	1	..
Tinnevelly	34	302	34	302	..	..	..	..
North Malabar	7	143	..	..	7	143	..	..
South do.	15	260	..	..	..	..	15	260
South Canara	9	97	5	47	3	47	1	3
Total ..	322	2,664	205	1,189	81	506	36	969

Judging merely from the areas put under settlement during the year and those finally settled, it may be considered that improvement in the progress towards reserved forests was not so marked as in the previous year; but a comparison of the "settled and reported on" balances of the two years shows that greater progress was made in the latter year (1888-89).

Of the 205 blocks of "settled and reported on" balance on 31st March 1889, final notifications in respect of about 20 blocks were submitted to Governmentf or approval. 123 were pending with the Board and 62 were returned to Collectors for revision. Hence the delay in the publication of the notification under section 16 after the settlement officers have completed their work.

8. Messrs. A. Pinto and A. M. Jones, Deputy Collectors, were employed throughout the year as special Forest Settlement Officers for this Circle, the former in charge of Chingleput, Madura, Tinnevelly and Coimbatore, and the latter in charge of North Arcot, South Arcot, Salem, Trichinopoly and Tanjore districts, Malabar and South Canara remaining, as usual, in charge of Divisional officers of the Land Revenue Department.

The work performed by both the special officers during the year was as follows :—

	Issue of proclamation after notification under section 4.		Settlement of claims.		Report after settlement submitted.		Final notification proclaimed.	
	Blocks.	Area in square miles.	Blocks.	Area in square miles.	Blocks.	Area in square miles.	Blocks.	Area in square miles.
Mr. Pinto	24	217	31	57	57	205	5	48
Mr. Jones	66	278	118	500	102	529	41	345

Mr. Pinto's salary and office establishment and contingent charges paid during the year amounted to Rs. 11,815, whereas Mr. Jones' cost Rs. 10,951.

The cost of forest settlement in this Circle since the commencement up to date is shown below :—

	Rs.
1883-84	11,387
1884-85	19,578
1885-86	20,396
1886-87	33,264
1887-88	22,503
1888-89	22,766
Total ...	1,29,894

The total area of reserved forests as per Abstract D is 2,800 square miles, and by adding 1,189 square miles, being "settled and reported on" balance on 31st March 1889, we have 3,989 square miles, each square mile "settled" costing, on an average, Rs. 33.

Besides the above area, 506 square miles remained "settled" on 31st March 1889, but were not reported on owing chiefly to the pendency of several important appeals (on Forest Settlement-officer's decisions) in the District and the High Courts.

The Periyakalrayan second appeal in the High Court, referred to in the previous year's report, was dismissed for default and costs awarded to Government. The appeals preferred by Government against the decisions of the appellate courts of North and South Malabar in respect to the Padri, Kanot and Periya forests in North Malabar were still pending in the High Court at the close of the year.

9. *Reserved lands* not under settlement (included in Appendix 59-D). The following abstract shows the additions and transfers in this class of reserved lands. The object with which this abstract has been introduced is explained in paragraph 8 of last annual report :—

Abstract G.—Reserved lands not under settlement (included in Appendix 59-D) in square miles.

District.	Up to 1887-88.	Added during 1887-88.	Added during 1888-89.	Total.	Transferred to settlement up to 1887-88.	During 1887-88.	During 1888-89.	Total.	Balance remaining as simple reserved lands.
Chingleput	123	14	16	153	98	15	18	131	22
North Arcot	819	42	50	911	369	314	50	733	178
South do.	220	14	49	283	220	14	49	283	..
Salem	888	122	158	1,168	695	111	160	966	202
Trichinopoly	199	35	2	236	178	..	19	197	39
Tanjore	7	12	6	25	7	12	..	19	6
North Coimbatore ..	1,128	824	..	1,952	119	470	187	776	1,176
South do. ..	584	..	..	584	566	..	..	566	18
Madura	509	54	..	563	380	108	12	500	63
Tinnevelly	604	— 13	— 1	590	539	50	..	589	1
North Malabar ..	281	..	..	281	261	..	..	261	20
South do. ..	40	46	241	327	39	19	241	299	28
South Canara	110	910	5	1,025	113	28	3	144	881
Total ..	5,512	2,060	526	8,098	3,584	1,141	739	5,464	2,634

Of the 526 square miles added during the year, 6 square miles in Tanjore were all that were constituted reserved lands during the year under rule 2 of the rules under section 26 of the Act, the balance, 520 square miles, being treated as reserved lands by reason of their having been notified under section 4 of the Act. The largest area added was in South Malabar, where the newly-purchased Amarampalam forest and the Attapadi valley blocks were notified under section 4.

Of the 739 square miles transferred to settlement during the year by notification under section 4—

2 Square miles in Chingleput,
17 „ in Trichinopoly,
187 „ in North Coimbatore,
12 „ in Madura,

or 218 square miles in all were from areas of simple reserved lands previously constituted as such.

There were remaining at the end of the year 2,634 square miles of simple reserved lands, from which further selections of areas will be made for notification under section 4. The following is a rough estimate of areas likely to be proposed:—

	SQ. MLS.
Chingleput	36
South Arcot	463
Salem	622
Trichinopoly	102
Tanjore	39
Coimbatore	299
Tinnevelly	4
Malabar	35
Total ...	1,600

10. *Unreserved land.*—Appendices—forms 59 B and E—show areas of unclassed forests recorded for reservation, &c. The former exhibits a balance of 194 square miles and the latter 1,452 square miles on 31st March 1889.

Selections of blocks for notification under section 4 according to the preceding paragraph will be made also from these areas.

11. *Boundaries.*—The following lengths taken in hand are reported:—

—	Miles.	Cost.	Average.
		Rs.	Rs. A. P.
Up to 1887-88	4,312	43,982	10 3 2
During 1887-88	1,701	11,613	6 13 2
Do. 1888-89	1,572	16,191	10 4 10
Total ..	7,585	71,786	9 7 2

Although the expenditure during the year was much larger than in the previous year, and even exceeded the revised budget allotment for the year by Rs. 1,111, still the lengths of lines cleared or demarcated were smaller. This was apparently due to more perfection required in the completion of works, as the Deputy Superintendent, Government of India Survey Party, had complained of the work previously done being imperfect. The Acting Conservator issued detailed instructions to all District Forest Officers pointing out the importance and urgency of the work, and how it could best be done.

Boundary pillars were required to be set up at points that could be taken up by the Survey, and a thorough clearing of lines between them as well as other interior lines (which it was desired to show in the maps) was insisted upon. It was recommended that boundary lines should be cleared 15 or 18 feet broad (the pillars standing in the centre of the line), the trees being cut as low down as possible and removed from the line.

Attention to these and other details necessarily caused increased expenditure during the year in several districts, notably in Salem, where a great deal of clearing of boundaries was done for the Government of India Survey Party. The

number of miles demarcated in that district during the year was 534 at a cost of Rs. 6,282, or at an average rate of Rs. 12 per mile; whereas in the previous year only 407 miles were demarcated for Rs. 3,969, the average rate being Rs. 10 per mile. The progress made during the year in North Coimbatore and Tinnevelly may also be regarded as satisfactory, the lengths demarcated being 362 and 214 miles, respectively. North Arcot comes next with a length of 125 miles and Madura shows 100 miles. The lengths demarcated in other districts were less than 100 and do not call for any special mention.

In Chingleput—Besides the demarcation of 57 miles, 10,000 palmyra nuts were planted along about 3 miles of the Madayattur reserve boundaries.

In South Arcot—The want of taluk maps is reported to have prevented the Acting District Forest Officer from making calculations of outlines, &c., demarcated in previous years. He mentions, however, that most of the forest blocks in his district are demarcated by Revenue Survey stones, and that many have been roughly and incompletely demarcated by forest watchers by a ditch, a bank, or a fence, and such like. It is of course necessary to adopt a uniform system of demarcation after the settlement is completed

In Salem—A special demarcation officer was at work for 4 months. He was not able to do much work and his services were subsequently dispensed with. The District Forest Officer reports that, in order to assist all concerned in settlement, a system has been adopted whereby preliminary demarcation by flags is recorded on sketch-maps, and each post numbered and shown to the village officers, in whose charge they are temporarily placed.

Notices under the Boundaries Act were served on the owners of nine private forests, of whom seven had cleared their boundaries and two had not begun work up to the close of the year.

In Madura—The undemarcated portion of the southern boundary of Yerasaka-nayakanur zemindari was only partially completed.

In North Malabar—The proposed Kudrakote reserved forest was divided into thirteen blocks, and their preliminary demarcation hurried on, but the difficulty of procuring sufficient labor and the incompetence of the Ranger in charge of the work (whose services were since dispensed with) retarded progress.

No demarcation work could be carried out in any of the other ranges of the division owing to the appeals still pending.

In South Malabar (Nilambúr)—The whole area, except the Silent valley and the new Amarampalam forests, was surveyed and demarcated long before the introduction of the Forest Act, but no record is available to show the extent and cost.

An attempt at preliminary demarcation of the new Amarampalam forest was made and about forty-eight miles were attended to, but the work had to be postponed pending result of an appeal to the High Court by the late owner disputing the sale. The sale has since been held to be valid and confirmed.

CHAPTER III.

Surveys and Working Plans.

12. The revised budget allotment for the year was Rs. 40,616. The actuals amounted to Rs. 45,198, which include Rs. 39,337 on account of forest surveys by the Government of India.

Surveys.—The Government of India Survey Party, which was engaged mainly on topographical surveys in Madura, Tinnevelly and Travancore, has been transferred from 1st November 1888 to the Madras Government for employment exclusively on forest surveys in this Circle. A working season from November to March was fixed. It has since been changed to "from 1st September to 1st March" on the motion of Major J. R. McCullagh, R.E., Deputy Superintendent in charge of the Party. The adoption of a uniform working season for several districts may prove a difficulty; for the healthy season in different forests varies according to situation, altitude, and rainfall. For example, the depth of the monsoon is the healthy season in South Coimbatore,

but is unhealthy in parts of North Coimbatore, &c. Some forests are healthy in the hot weather, while others are deadly at that time. It was agreed that the scale to be adopted generally should be 4 inches to the mile with contours of 25 feet vertical. The Deputy Superintendent's estimate of annual outturn of work was 600 square miles of country.

From a statement obtained from the Deputy Superintendent, the approximate actual outturn of work during 1888-89 appears to have been the completion of topographical survey on the 4-inch scale of 169 square miles of reserved forests and triangulation and traversing in advance of 1,000 and 240 square miles, respectively.

The Deputy Superintendent remarks that the maps of the Madras Survey whenever available have been consulted: He finds fault with the demarcation work in many cases, and attributes the smallness of the outturn of topography to bad weather in the field, sickness among the subordinate establishment, &c.

The party was at work in three districts, viz., Tinnevelly, Madura and Salem. In the first-named two districts, the work consisted chiefly of the traversing of boundaries and topography on the 4-inch scale of forest reserves, and in Salem, it was mostly triangulation with a certain amount of traversing.

In Tinnevelly—The whole of the Srivilliputur block No. V has been surveyed together with a portion of the adjoining proposed reserved forest extending to the base of the slope, and in Madura four blocks of reserved forests (Mudimalai, Pillaiyar Nattam, Alagarmalai, and Vikkramangalam) have been completed.

The fair mapping of these blocks was in progress at the close of the year. The cost of forest surveys during the year by the Government of India Survey Party amounted to Rs. 39,337, and a sum of Rs. 5,861 was expended on surveys, &c., done departmentally in the following districts:—

In Chingleput—The survey of the southern portion of the Kambakam hill reserve was plotted during the year.

In Salem—A temporary surveyor was at work for ten months in the year and surveyed, with compass and chain, an outline of 158 miles of thirteen reserves with an area of about 100 square miles. Maps of 12 reserves in this district were enlarged at the Madras Survey office to a scale of 16 inches to the mile. 8-inch scale maps of 5 reserves were received from and returned (after approval) to the Survey office to be photozincographed.

In Trichinopoly—A temporary surveyor was at work during the second half of the year. He completed the traverses and made rough plans of 5 reserves previously surveyed; and surveyed with theodolite and prepared traverses and rough plans for 3 other reserves with an area of 8 square miles. This completes the survey of Manaparai sub-range in Kulitalai range. The above traverse survey resulted in the discovery of an increase of 4,487 acres in 5 blocks, and a decrease of 597 acres in 3 blocks, the net increase being 3,890 acres or 6 square miles.

In Tanjore—A temporary surveyor surveyed with theodolite some of the casuarina plantations and natural scrub jungles, and also prepared plans.

In Madura—A large clearing of lines was made for survey purposes. An enlargement of the old 4-inch Alagar hill map on the 8-inch scale and a map on the 8-inch scale of the Katchakati valley or No. IV Range forest, were received from the Madras Survey.

In Tinnevelly—A departmental survey of a portion of the Pápanásam forests was in progress, but its completion was delayed owing to the surveyor's urgent deputation to look after demarcation works.

In South Canara—A temporary surveyor was at work during the whole year and surveyed 62 square miles of reserves for Rs. 1,002, or Rs. 16 per square mile. The work was done with the plane-table, but recourse was had to chain and compass also when required; and includes observation of rivers and water-courses, roads and pathways, wet, dry and garden cultivation within and bordering the blocks under settlement, sundry details and the configuration of the ground by plane-table, and hill shading in which the contour lines are taken entirely by eye, the general result

being based in the case of the ghât slopes in some degree on the heights shown by the trigonometrical survey.

The areas reported as surveyed departmentally up to the end of the year are as follows:—

—	Square miles.	Cost.	Average.
		Rs.	Rs. A P
Up to 1887-88	1,162	6,114	5 4 2
During 1887-88	117	5,864	50 1 11
Do 1888-89	170	5,861	34 7 7
Total ..	1,449	17,839	12 5 0

The Madras Survey made arrangements during the year for resuming and completing the survey of the padugais in the Trichinopoly district, but no information is available showing progress made.

13. *Working plans.*—No marked progress can be expected in this direction until we either have a special working plans branch duly organised and set to work in a systematic manner, or the superior staff is considerably augmented. The charge of our District Forest Officers is already far too large for efficient supervision of even ordinary works, and it would be expecting too much if they were required to make any real progress in working plans without special or extra assistance. The District Forest Officers will, of course, be in a position to furnish much valuable data and useful information, but the work itself will probably be done best by a special agency, to be employed exclusively on it, as in the case of surveys. Good reliable maps also are absolutely necessary.

The Government have not yet signified their approval of the preliminary working plans for the Chinnar and Noyil-Vellengiri working circles in the Bolampatti range, submitted to them in 1887-88. There has however been a reference from Government in connection with these working plans, inquiring whether fees were collected for cattle-grazing in the Attapadi valley, and whether the pasturage available in that valley was reasonably accessible to cattle-owners residing in the Bolampatti valley villages, &c. The Collector has since replied, but Government appear to await further report. Considering the remarks of the District Forest Officer (Mr. Porter), the substance of which is given below under head South Coimbatore, it seems still doubtful whether the plans in question will quite do for the purpose intended.

In Chingleput—Compartment lines were marked in the Kambakam, Ambakam and Sattiavedu reserves; a preliminary working plan for the first-named reserve was also completed by the District Forest Officer for submission to the Conservator; a similar plan for the Ambakam reserve was in progress at the close of the year. The working plan for the Meyur plantation drawn up in the previous year requires alteration owing to several casuarina trees of 6 years' growth having been blown down during the cyclone in October last.

In North Arcot—Compartment No. 3 (49·15 acres), Virinjipuram of the "plantation working circle," was felled. The yield amounted to 1,042 tons of wood, whereas the working scheme (10 years' rotation) was based on an annual acre-increment of 3 tons. There is however yet some more wood to be obtained from the area in question. The planting of it was very irregular; some of the trees were 15 years old, and others were of all ages from 12 to 6 years. Hence the large discrepancy in yield between the estimate and actuals.

Compartment No. 3, Kilminnel (area 26·10 acres), was also felled for sleepers and supply of fuel to the jail at Vellore. The outturn has yet to be ascertained. Ten years is found to be the best age at which casuarina pays well in the district. The trees then average 10 to 12 inches in girth at 9′ × 9′ apart. They do not require splitting up for engine fuel.

The growth of casuarina here is not as rapid as on the coast, and plants die out in large numbers for want of moisture in the soil. The plantations nevertheless pay fairly well.

In Trichinopoly—The provisions of the sanctioned working plan of the Cauvery line plantations were strictly adhered to.

In South Coimbatore—The result of the year's felling in the Sholakarai block was found to be very satisfactory. Mr. Porter had considerable difficulty here in getting contractors to agree to the terms of the Forest department, particularly as to felling flush with the ground, and trimming the stumps; but all those difficulties have been surmounted.

It was found that the original working plan was unsatisfactory, in that provision had not been made for returning quickly enough to the purely bamboo coupes. This defect has been lately remedied. The Tekadi leased forest (26 square miles) and the Noyil-Vellingiri blocks (20·7 square miles) of the Bolampatti reserved forest have been worked under the jardinage system according to working plans, but without satisfactory results. In regard to the leased forest, the District Forest Officer proposes to substitute the system known as the "*mode des éclaircies*," that is, the method of thinning over a certain portion of the area, treating the rest of the forest as before under jardinage, that is selection felling of overripe, ripe, or specially-wanted trees. It has been found that the preliminary working plan is defective, because the estimate of the stock of timber was taken by linear valuation surveys over only from 5 to 6 per cent. of the area of the forest, and a serious attempt is being made to count *all* the trees. This is a great undertaking, but can be done. The weak point of all the rough working plans adopted for large tracts of forest is that they do not sufficiently provide for regrowth; and it is proposed to try to foster the growth of teak by the method of thinnings.

In Madura—Working plans for Alagarmalai and Gundan shola were prepared by Mr. Gass, but have not been submitted for approval owing, in the former case, to his desire to verify the accuracy of areas, &c., adopted from the Madras Survey map with the new one expected from the Government of India Survey Party, and, in the latter, to final settlement and notification of the block as a reserved forest not having been completed.

In South Malabar—The working plan of the Wálayár reserve was submitted for approval; certain compartment lines in the reserve were also opened out during the year.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

Section 1—Reserved Forests.

Section 2—Other Forests.

(a) Establishment, Ranges and Beats.

14. *Establishment.*—The sanctioned establishment for the Circle consisted of—

—	For the year 1887-88.	For the year 1888-89.	Difference.
Permanent.			
Conservators	1	1	..
Deputy Conservators	7	7	..
Assistant Conservators	6	6	..
Sub-Assistant Conservators	6	7	+ 1
Rangers	30	33	+ 3
Foresters	73	77	+ 4
Forest Guards	359	396	+ 37
Clerks	88	88	..
Peons	108	108	..
Temporary			
Supervisors	51	59	+ 8
Surveyors	6	7	+ 1
Draughtsmen	2	2	..
Depôt-keepers	11	11	..
Watchers	649	779	+ 130
Tannahdars	307	302	— 5
Lascars	23	23	..
Gardeners	96	73	— 23
Clerks	7	9	+ 2
Peons	18	18	..
Total Officers	1,848	2,006	+ 158

The small increase in the number of both permanent and temporary employés is fully justified by the increase of 543 square miles in the area of forest reserves and of Rs. 87,889 in forest revenue over the previous year's results. The proposals for an extension of the permanent controlling and executive staff appear to be still under consideration by the Government of India. Meanwhile, the Local Government called for a scale of permanent subordinate establishments to meet the present requirements of the department. One was submitted by the Acting Conservator (Mr. Cherry), the total cost proposed being 33 per cent. over the existing scale, but it did not meet with the approval of the Board. The matter, however, is still pending with Government. Dr. Brandis himself in his "Suggestions" written in 1882 foresaw and urged the necessity for a revised and increased scale being prepared after three years' experience. Six years have since elapsed. 8,098 square miles of reserves are in hand. And the revenue has risen from 5¼ to 9 lakhs. Under these circumstances, a considerable increase to the permanent staff seems justified, and demands are urgent from almost all districts.

Ranges and Beats.—The 13 Forest Divisions or District Forest Officers' charges in the Circle remained divided into 69 ranges, of which 31 were in charge of Rangers and 38 under Foresters, no better arrangements being possible under existing circumstances. A Range officer's average charge was 916 square miles of country with 117 square miles of forest reserves in it.

The number of Forest Guards' beats may be said to equal the number of Guards, which was 396, the average extent of a beat being 160 square miles of country with 20 square miles of reserves in it.

(b) General Protection and Breaches of Forest Laws—(Appendix 63).

15. There can be no doubt that general protection had continued to improve, for besides the reasons urged in the last report, it will be seen from Appendix 63 that the number of offences of "unauthorized felling or appropriation of wood and minor forest produce" alone detected during the year was 1,100 as against 1,065 in the previous year.

Abstract H—Forest offences—see Appendix 63.

Year.	Brought forward from previous year.		Cases added.		Cases disposed of.							Balance.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons	Percentage of cases withdrawn.	Percentage of cases compounded.	Amount realized.	Percentage of cases acquitted.	Percentage of cases convicted.	Cases.	Persons.
									Rs.				
1887-88 ..	156	..	1,644	..	1,627	4,305	1	36	3,271	14	49	173	..
1888-89 ..	173	..	2,201	..	2,167	5,557	4	41	4,915	15	40	207	..

The percentages of cases withdrawn, compounded and acquitted, as compared with those of last year, have risen by 3, 5, and 1 respectively. The withdrawal of cases was chiefly in Salem and South Coimbatore. In the former, it was due to the District Forest Officer having arranged for direct reports being sent to him of all cases, to enable him to decide whether they should be prosecuted, compounded or withdrawn, and in the latter (South Coimbatore) it was owing to petty cases having been withdrawn after warning the persons concerned. The action taken by the District Forest Officer of Salem will result, if generally permitted, in a saving of time and references; but the question of the legality of the course is still pending.

The rise in the percentage of cases compounded by Forest Officers is highly satisfactory. The compensation realized during the year shows an average of Rs. 5-7-8 per case and Rs. 2-2-8 per person accused as against Rs. 5-10-1 and Rs. 2-1-3 respectively last year. These results seem to show that the power to compound was exercised with tact and judgment The largest percentage of cases

compounded was in Trichinopoly, North Arcot and South Arcot coming next. Of the amount of compensation realized, Salem and Trichinopoly contributed over Rs. 1,000 each, North Arcot and South Coimbatore over Rs. 500 each, and the rest under.

Convictions were obtained in 40 out of the 55 per cent. of cases tried by the magistracy during the year as against 49 out of the 63 per cent. last year.

In Chingleput, North Arcot, Madura and Salem, over one-third of the cases tried were acquitted. The District Forest Officers of the first three districts have not explained the cause. The District Forest Officer, Salem, notwithstanding the fact of his having directly taken into his own hands the control of these cases, attributes the result to the " apathy of the subordinates and the difficulty of securing the evidence of witnesses unconnected with the department."

1,326 head of cattle in Chingleput and 6,299 in South Arcot were impounded for trespassing into forest reserves. The pound fees collected in the latter district amounted to Rs. 754. In North Arcot and in South Coimbatore most of the cases compounded were those of cattle trespass.

(c) Forest Fires and Fire-protection—(Appendix 62).

16. The revised budget allotment for the year was nearly worked up to, and the actual expenditure amounted to Rs. 20,053.

Forest fires cannot be properly recorded until the " record maps " referred to in the last annual report are ready for all the reserves. Such maps can only be prepared after the completion of surveys, when good general maps of reserves will be available for the purpose. In the meantime, the information furnished regarding forest fires in unprotected areas must be taken for what it is worth and should not be altogether relied on. It will be seen from the following abstract that the percentage of area which escaped fire in the untraced or not specially-protected tracts was the same as in the preceding year :—

ABSTRACT I—Fire protection (see Appendix 62) in square miles.

—	UP TO 1887-88.		DURING 1887-88.			DURING 1888-89.			Total cost per square mile.
	Forest reserves attempted.	Total cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	Attempted.	Percentage which escaped.	Average cost per square mile.	
		RS.			RS.			RS.	RS.
Fire-traced ..	1,081	56	1,250	99	16	1,502	97	13	67
Untraced ..	4,414	..	6,305	69	..	6,596	69	..	..
Total reserves ..	5,495	..	7,555	..	..	8,098	..	..	..

From the above it will be seen that the addition to the fire-traced area during the year amounted to 252 square miles as against 169 square miles in the preceding year. The districts of North Arcot, South Coimbatore and Tinnevelly contributed largely towards the increase. The average cost per square mile was Rs. 13 as against Rs. 16 in the previous year, which is a reduction of about 9 per cent. The percentage of success was 97 as against 99 in 1887-88, the decrease of 2 per cent. being due solely to large fires which occurred in North Malabar.

In this division the Begur reserved forest (area 24 square miles) was " specially protected " as usual at a cost of Rs. 893 during the year and the Kurchiyat reserved forest (in Chedlet) with an area of 28 square miles, which up to the preceding year was only partially protected with considerable success, had been placed under special protection during the year at a cost of Rs. 317. In the former, fire protection was commenced in time and complete isolation secured. No fires crossed the frontier either from Mysore or from Coorg, but certain incendiaries made repeated attempts to fire the interior of the forest, though, through the vigilance of the Ranger in charge, they proved unsuccessful. Towards the close of the year, however, fires were lit in several places simultaneously near Masalbetta and Hoongivile, and as the wind was blowing very violently at the time, they could not be extinguished until they had burnt a large area, nearly one-third of the block. Two days after this occurrence another incendiary fire was discovered near Belgola hill; but the District Forest Officer (Mr. Morgan) was on the

spot and after much personal exertion arrested its progress. On the following day, a similar fire was observed at Aralagudday which was also put out by the District Forest Officer. On the whole, two-thirds of the forest was burnt over by these three fires. The District Forest Officer offered a reward of Rs. 100 to any one furnishing information which would lead to the detection of the offenders, but to no purpose.

The fires in the other (Kurchiyat) forest were even more deplorable. There were no less than four fires, three of which crossed the frontier from Mysore owing to delay on the part of our Ranger (Mr. Saldanah) in burning his fire lines, and the fourth was the result of incendiarism. Of the three fires from Mysore, the first occurred on 8th February near New Gulur and the Ranger succeeded in extinguishing it before it had burnt over 100 acres; the second occurred on the 13th idem near Old Gulur and burnt over two square miles, as there was much difficulty in putting it out at once, owing to the high wind blowing at the time; the third happened on the 16th idem near Bunkavadi road and had passed through one square mile before it was arrested. The Ranger's excuse was that the Forester of Mysore who had instructions to co-operate failed to attend in time. The Ranger was censured for his indiscretion in submitting himself to the delay, and the conduct of the Mysore Forester was duly brought to the notice of the Mysore authorities (*vide* Board's Proceedings, 20th May 1889, Forest No. 276).

The fourth of the incendiary fires was lit on 4th March simultaneously (about noon) in the interior of the forest in three places near Dod Colachy, Madapalli and Amavoil. Although the Ranger went over to the spot at once, he was unable to prevent the fire, as the number of coolies required for prompt action was not available. In the meantime, the fires from the three points had joined and formed one continuous blaze extending over 8 miles in length and 2½ miles in breadth. This placed matters beyond remedy. The fire continued to burn for six days and spread over the whole area of the forest in question. There were no interior fire lines and the protection was dependant upon a good exterior line only. It is reported that, even if the former had existed, it was doubtful if the fire could have been localized, as high winds continued to prevail throughout. The fires have of course done much damage, for the effect of a fire is enhanced by previous protection. The problem of protection in these forests is so difficult that it is easy to understand the almost hopeless tone with which the officer in charge summed up his report on these fires. In some parts the grass is over 6 feet high and is in the hot weather as dry as tinder; in other parts the ground is covered with dead leaves; and when it is remembered that the forest tribes have burnt the forest for generations for sport or simply for freedom of movement, that there are wandering tribes of Brinjaris who burn the grass for their cattle, and that one of the simplest ways of paying off a grudge against a forest official high or low, is to burn his forests, it is no wonder that fire protection is difficult. The remedy lies probably in not attempting too much; and too much is attempted at present.

The percentage of fires in other districts were either *nil* or very trifling and they are not worth special mention in this report; but it is to be feared that the immunity is in some cases fictitious and the result of defective reports. The Acting Conservator believes, however, from late inquiries on the spot that fire protection on the Anaimalais (South Coimbatore) was particularly successful last year.

In North Coimbatore, on the contrary, the attempts at fire protection seem to have fallen into the other extreme and not enough special protection was attempted. The Collector remarks that it was a pity that the Vellamundi and the Eastern Slopes Nilgiris reserved forests were not protected at least in parts.

Referring to the remarks of Government on the previous annual report in the matter of cost of fire protection, the Conservator has not yet been able to ascertain how in Bombay special fire protection cost only Annas 2 per square mile! The Acting Conservator will, however, quote here for the information of the Board and Government the explanation of one of our trained Forest Officers (Mr. Porter) regarding the cost of fire protection in the South Coimbatore division under his charge.

" In comparing the cost per acre of fire protection, the nature of the jungle through which the fire lines run has to be taken into consideration. On the Anaimalais and in the Bolampatti Valley, the lines have to be cut through a very dense inflammable undergrowth, and to ensure perfect safety it is necessary to give them a breadth of 50 yards; on the Nilgiris, near Oota-

camund, a fire line 6 or 7 feet broad running over a grass hill may be sufficient and it at any rate costs very little and yet people unacquainted with the local circumstances wonder why there is so much difference in the cost of fire protection in different districts."

(*d*) *Grazing.*

17. The policy advocated by Government in their review of the Forest Administration Report for 1886-87 has been steadily kept in view and constantly urged on the attention of District Forest Officers. That advance in the matter of levying grazing fees has been only gradual, as desired by Government, may be inferred from the fact that the revenue under II. (*d*) Grazing, during the past year amounted to Rs. 52,396 (which was very near the revised budget estimate) as against Rs. 46,038 in 1887-88 and Rs. 35,665 in 1886-87, whereas if the rights of Government to levy grazing fees in all districts in forest lands under the control of this department were fully insisted on, the revenue would have amounted to a very much higher figure.

It will be seen from the following abstract that the small increase in revenue was proportionate to the increase in the number of cattle grazed, the fact that the average rate per head remained the same as in the preceding year showing that there was no additional taxation.

ABSTRACT J.—Grazing and grass collections.

Items.	During 1887-88.			During 1888-89.		
	Number.	Amount.	Average.	Number	Amount.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
By grazing fees per head	285,233	42,650	0 2 4	331,080	48,366	0 2 4
Do. contracts per square mile By grass sales per ton	..	3,388	..	..	4,030	..
Total ..	285,233	46,038	..	331,080	52,396	..

North Coimbatore collected the largest amount of revenue (Rs. 23,005).

The North Coimbatore forests are a huge grazing ground, not only for cattle of the district, but also for foreign cattle. Owing to the difficulty of communication, these forests cannot, for the present, be worked to any great extent profitably for timber, at any rate departmentally. Grazing fees were levied at Annas 2 a head for cattle of the district, and at Annas 4 a head for foreign cattle. Hill villagers were allowed free grazing at the rate of 4 annas for each acre of patta area and villagers at the base of the hills at 1 anna per acre. South Coimbatore, Trichinopoly and Salem contributed over Rs. 5,000 each and North Arcot, Chingleput and South Arcot from about Rs. 2,000 to 3,000 each.

The following district notes are added:—

In Chingleput, the system under which grazing in the reserves is permitted has been better understood. This and the improved pasturage available created a considerable demand for grazing permits.

In North Arcot, grazing on payment was permitted in only three or four reserved forests up to 31st December 1888, but from 1st January 1889 the reserves in Chittur, Chandragiri, Palmanér, Gudiyátam and Pólúr have also been thrown open at half rates, even which many villagers are not inclined to pay as they have ample free grazing ground available outside the reserves, but with the advance of time and cultivation the revenue from grazing is expected to improve. Personally the District Forest Officer (Mr. Sheffield) is averse to any sort of grazing being allowed in reserves, at least for the next 20 years. He complains of very great damage done in newly-formed reserves by the admission of cattle and consequently fire.

Under instructions from the Collector, the District Forest Officer had large quantities of grass cut in the Chittoor and Ambúr reserves and converted into hay which was distributed free of payment among the ryots in the neighbourhood for the use of their cattle after explaining to them the process of manufacture and the advantages of having a large store of hay for use during the hot season when pasturage is

scarce and cattle have to be sent to long distances for a scanty supply of green grass. The ryots evinced interest in the experiment and promised to take it into their own hands this year.

Free grazing was permitted both in the reserved lands and in the open forests (unreserved) as usual.

In South Arcot, the Collector remarks "there have been scarcely any complaints from ryots of the imposition of those (grazing) fees which is a satisfactory symptom."

In Salem, two or three reserves in each range were thrown open for the grazing of a limited number of cattle, preferentially those belonging to neighbouring cultivators, on payment of half rates. The District Forest Officer advocates a further reduction in rates and admission of cattle into reserved forests (not under special fire-protection) without limit as to numbers in places where there is not much young growth requiring protection.

In Trichinopoly, the right of grazing in the Cauvery and Coleroon plantations and padugais was leased out.

Cattle were allowed to graze on payment of fees under the permit system in all other reserved forests and reserved lands, but goats were strictly excluded. One of the Range officers reported that, in consequence of this prohibition, many ryots had sold their goats and bought sheep instead! The District Forest Officer, however, remarks that attempts to graze goats illicitly are frequently noticed and that owing to the inadequacy of the number of guards and pounds existing, several cases go undetected and consequently unpunished. Cattle found trespassing have to be taken to village pounds 6 or 7 miles distant from the reserves in some cases. This is difficult to manage and cattle owners try to rescue their cattle on the way to the pounds.

In North Coimbatore, there is nothing to add beyond the fact that the census-taking of cattle was repeated on the 30th April 1888. Besides grazing fees, the District Forest Officer realized Rs. 480 by sale of grass. The Collector remarks that this revenue is not worth retaining and wishes that the cutting of grass (free of charge) should be encouraged. This remark may be true for North Coimbatore, or for such parts as contain very large blocks of forest, but is not to be taken as applicable to all sorts and conditions of forests.

In South Coimbatore, Range officers and Guards are reported to have been more active in preventing unauthorized grazing.

In Madura, a number of reserved forests was thrown open for grazing on payment of half rates. Owing to the scarcity of fodder in the plains in No. V. Range, free grazing was permitted as a temporary measure in one of our chief reserved forests—Alagarmalai hill. There were no complaints regarding insufficiency of pasture grounds, nor was any serious damage done to forests when cattle were admitted under proper supervision.

In Tinnevelly, the greater portion of reserved lands being available for free grazing, there was not much demand for pasture in reserved forests, although they were open for the purpose under certain restrictions regarding fire, &c.

In North Malabar, an immense area for free grazing is available outside the reserved forests.

In South Malabar, no cattle require grazing in Government forests as there are many private forests available for the purpose.

In South Canara, the question of grazing has not been taken in hand.

(*e*) *Natural Reproduction.*

18. The following notes are taken from the district reports:—

In Chingleput, the natural reproduction was promising on the whole. The Red-sander (*Pterocarpus santalinus*) seedlings were found to be plentiful on the western slopes of the Kambakam hills; and coppice of other species was fair.

Babul coppice in the Pulrambakam reserve was a failure, as the shoots were all destroyed during the heavy rains in October last. The subsequent growth was found to be poor.

In North Arcot, the Napier and the Mámandúr reserves were found to contain numerous seedlings of all kinds, the most predominating species being the Red-sanders and *Anogeissus latifolia*. Even the mature trees in these reserves showed vigorous growth. In the fenced reserves from which cattle were strictly excluded, the improvement in growth was so marked that (according to the District Forest Officer's statement) where a man could have ridden over the highest bush in some of these reserves a few years ago, he could now hide himself on horseback among the bushes and trees. The improvement in the unfenced reserves was comparatively poor; and as both species of reserves have equally escaped fire, the District Forest Officer's conclusion seems warranted that the difference is entirely due to the exclusion of cattle.

In South Arcot, the re-growth is said to be fair, considering the difficulty in controlling cattle, and the want of an adequate staff of watchers.

In Salem, the District Forest Officer remarks on the destruction of forest on the Kollimallais for fugitive cultivation and states that the re-growth on the plains in such parts of the Uttankarai taluk for instance as have been closed for many years is meagre. However, he suggests that this may be the result of a defective establishment.

In Trichinopoly, the reproduction by coppice of *Wrightia tinctoria*, *Albizzia amara* and *Acacia planifrons* in the Manaparai hills, and by coppice and seed of *Cassia florida*, *Acacia arabica* and *Melia azadirachta* in the Cauvery plantations, and of *Acacia arabica* in the tank beds, and of *Memecylon tinctorium* in the Udayárpálaiyam range, was all reported to be satisfactory. The reproduction of bamboos from seed on the Pachamalais over areas where they died after seeding was also good.

In Tanjore, the coppice growth of *kasan* (*Memecylon tinctorium*) and avaram (*Cassia auriculata*) was fairly good.

In North Coimbatore, young growth of sandalwood in the specially-protected sandalwood reserves, and of Karuvélam (*Acacia arabica*), Velvelam (*Acacia leucophlœa*) and Margosa in the specially protected fuel and fodder reserves, was springing up.

In South Coimbatore, the coppice and seed reproduction in the Sholakarai block in No. VIII range was all that could be desired and the number of seedlings which appeared in the coupes felled over about a year after the felling, was simply surprising. The District Forest Officer considers that the block might with advantage be converted into a high forest; a very large percentage of these seedlings consisted of teak and rosewood, although the latter tree is scarcely found in the block. This and the fact that the immature trees in the block could not produce fertile seeds have led the District Forest Officer to suppose that either the seeds were lying dormant in the ground, or that they were carried there by birds, squirrels, &c., from the adjoining hills. As such a seedling reproduction was not anticipated when the working plan was framed, arrangements had to be made—now made—for the due protection of these valuable seedlings. In other ranges, even where the forests were under protection, the reproduction is not considered satisfactory for the reason that although the protection had resulted in a re-growth of some kind, still the more valuable species such as teak, blackwood and vengai were found to be scarce, *e.g.*, in the Punachi reserve in the Anaimalais which has been closely protected from the inroads of fire and cattle and promiscuous felling for six years, we find merely a splendid crop of grass and a few seedlings of the less valuable trees here and there, although there are many mature seed-bearing teak, rosewood and vengai trees in the reserve. The remedy suggested by the District Forest Officer has been already adverted to above under working plans, and consists in modifying the old system of selection fellings and assisting the reproduction of the better species of trees by a system of cleanings and thinnings.

In Madura, the coppice growth at Kadavur in Alagar hill reserved forest was coming on well.

In Tinnevelly, the reproduction both from seed and coppice continued to be good in the coupes felled on the coppice with standard system during the past three years.

In North Malabar, the seeding of *Pterocarpus marsupium* and blackwood was found to be satisfactory and there were many young seedlings, but most of them were

destroyed by the fires which occurred during the year. Teak as usual reproduced very badly. Reproduction in the Ghât forests (Periya) continued to be good.

In South Malabar, the growth from seeds and stools in Karimpoya and Nellikutta reserves continued to be good, and coppice growth in the Wálayár reserve was satisfactory.

In South Canara, the reproduction from coppice in Sabladi and Poitaji-Kayer Palla reserves was promising.

In the experimental clean felling made in Chinkramale in April 1887, the reproduction was fair, but the shoots were somewhat stunted and branch-like.

Several catechu seedlings were observed in Sabladi even after the hot weather, probably due to fire protection. A few casuarinas 5 years old which were cut back have coppiced well. Experiments in coppicing casuarina are much wanted, for the results are most uncertain.

(*f*) *Artificial Reproduction, Regular Plantations, Cultural Operations and Topes* (*see Appendices* 60 *and* 61).

19. This branch of work of the department received due attention during the year. The revised budget estimate was nearly worked up to and the actuals exceeded those of the previous year. The operations during the year also extended over a larger area.

The following abstract exhibits progress up to date :—

—	Up to 1887-88.		Added during 1887-88.		Added during 1888-89.		Total	
	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.	Area in acres.	Cost.
		Rs.		Rs.		Rs.		Rs.
Plantations	11,786	5,85,048	+ 132	24,780	(*a*) + 149 / — 275	25,532	11,792	6,35,360
Topes	18,909	2,91,586	— 26	3,381	+ 15	5,189	18,898	3,00,156
Other areas	2,972 and 100 miles of channel banks.	32,661	+ 389	1,978	+ 485	2,093	3,846 and 100 miles of channel banks.	36,732
Total ..	33,667 and 100 miles of channel banks.	9,09,295	+ 495	30,139	+ 649 / — 275	32,814	34,536 and 100 miles of channel banks.	9,72,248

(*a*) For explanation, see remarks in Appendix Form No. 60.

In Chingleput, 1,475 trees of six years' growth in the casuarina plantations were blown down during the cyclone. Floods in the Pálár washed away about 5,500 casuarina seedlings planted during the past two years in the Wallajah tope. They were since replaced.

Casuarina wood in about 14 acres of the Meyur plantation was felled. The yield was 50 tons to the acre on an average. The age is not given : presumably some 10 years.

12,000 casuarina seedlings were put down in the area felled over.

The mahogany, bamboo and other seedlings planted on the Kambakam hills were doing well.

The produce of all the topes was leased out for Rs. 211 as against Rs. 150 obtained in the previous year.

In North Arcot, a former Collector (Mr. A. J. Stuart) had large quantities of seeds of various kinds collected and sown in the Chittur reserve under all the different methods known, but the results were not encouraging. Numerous seedlings were produced, but most of them were stunted and did not thrive. On the other hand, the natural reproduction from old roots and stumps was found to be far superior to the artificial sowing.

In South Arcot, 50,000 casuarina plants were put out to fill up blanks in felled areas The plants were not good ones; the transplanting appears to have been most carelessly done with their roots much contorted. The transplants proved, therefore, a thorough failure. The question of the admission of charges is under enquiry.

1,642 measures of seeds of various kinds and 6,070 palmyra nuts were sown by different methods in several blocks.

In Salem, the topes situated in the compound of the travellers' bungalow were transferred to the Local Fund Board; those in the compound of public offices to the respective officers in charge of such offices; and the remainder were placed under the immediate supervision of the Revenue taluk authorities, the ultimate control over all the Government topes in the district being still retained in the hands of the District Forest Officer as representing the Collector.

In Trichinopoly, 24 out of a felled area of 73 acres in the Cauvery plantations were replanted with casuarina and *Cassia florida*; seedlings of casuarina, *Inga dulcis*, sissu and bamboo were put down in Coleroon plantations in Musiri to fill up blanks: 6 acres of the Coleroon padugais in Trichinopoly were planted with casuarina, and 4 acres were sown broadcast with babul seed. The latter was a failure due to want of rain.

In Tanjore, 207 acres were dibbled in with cashewnuts; 80 per cent. germinated and the plants were in a fairly good condition; seeds of *albizzia*, &c., were sown broadcast in several blocks; about 70 per cent. germinated, but the seedlings were fast dying out owing to excessive drought.

2,000 seeds of palmyra were sown *in situ* along the reserve boundaries. One-third germinated and was doing well.

In North Coimbatore, the paths in the sandalwood plantation were cleared and the trees pruned. The small stone anicut was repaired.

In Madura, the Vannathiparai teak plantation was thinned. The Kodaikánal *Eucalyptus* plantation was fenced again during the year and cattle strictly kept out. That helped to foster the growth of coppice shoots. The new planting at Gundan shola was extended during the year by about 15 acres. The planting was not so successful as in the preceding year, as there was severe frost in February last. The planted area was fenced in with a wooden post and rail fence.

Seeds were dibbled in and sown broadcast at Kadavur. Results were not known at the close of the year.

In Tinnevelly, 120,000 palmyra nuts were sown in 215 acres of the Kudirimalaiteri, where 14 acres were also sown with odai (*Acacia planifrons*) by penning some goats and feeding them on *Acacia planifrons* pods. A further area of 35 acres was planted with nanal grass. The cultural operations in the Southern range extended over an area of 14½ acres in the Ambásamudram taluk.

In North Malabar, the teak plantations at Kanót were weeded, pruned and fire-traced as usual. The trees continued to improve in appearance and their measurements recorded during the year under report were as follows:—

Number of block.	In what year planted.	Measurement of the largest trees.		Measurement of average sized trees.		Remarks.
		Height in feet.	Circumference near the base in feet.	Height in feet.	Circumference near the base in feet.	
I	1876 ..	80	3	60	2½	About one-third of the number of trees look sickly and stunted.
II	1877 ..	75	2½	52	2	The average refers to one-half of the number of plants. All the trees look fairly better.
III	1878 ..	85	3½	60	2½	All the trees are healthy.
IV	1879 ..	..	..	27	1½	All the trees look fairly healthy. They were all attacked by caterpillars and the leaves skeletonised, but the trees did not materially suffer from this pest.

The Government Mukkie cardamom garden and the Mukkipoya cardamom plantation (purchased from Mr. Fletcher) were weeded and pruned during the year. The crop was fair on the latter estate.

In South Malabar, 112,450 teak and 1,342 mahogany plants were set out in about 117 acres. There were many failures owing to want of rain in due season, but they were replaced to the number of 20,455. 25,791 casualties of teak and 1,111 of mahogany in the previous two years' plantings were also made good. The average height of last year's plants (teak) was 8½ feet and girth at base 6 inches, which is noteworthy. The growth of mahogany was, however, not so encouraging.

Twelve pounds of mahogany seeds, received from the Superintendent, Government Botanical Garden, Calcutta, in August 1888, were sown at once in nursery beds. They germinated fairly; about 2,200 seedlings were raised in bamboo pots for the next planting.

In South Canara, the planting of casuarina at Ullal and Tannirbhavi was carried on as usual. There were but few casualties.

One acre of casuarina 20 years old was cleared at Ullal. The yield including roots and branches was 112 tons, the average annual acre increment being about 5½ tons.

(*g*) *Works of Improvement.*

20. The following may be noticed under this section:—

In Chingleput, portions of coppiced area in the Pulrambakam and Kambakam reserves were fenced.

In South Arcot, 81,000 trees were pruned and trimmed, and 5,678 trees were cleared of creepers. Thirty-three miles of patrol lines, 6 feet wide, were also cleared.

In Trichinopoly, cutting of creepers in the Cauvery padugai plantations was attended to; 24½ miles of reserve boundaries were fenced with thorns. Three more cattle pounds were constructed in three of the Cauvery padugai plantations and 85 head of semi-wild cattle were captured.

In North Coimbatore, fencing of the Arachalur reserve in the Erode taluk was partly attended to, and prickly-pear in that and in the Chennimalai reserve was eradicated.

In South Malabar, parasites in the teak plantations were cleared over an area of about 80 acres.

(*h*) *Experiments and Exotic Trees.*

21. The report on experiments with exotics, &c., is printed as an appendix as usual.

(*i*) *Communications and Buildings.*

22. Good progress was made during the year under this section of works, the total outlay exceeding that of previous years, more particularly under new works, both roads and buildings. The actual expenditure slightly exceeded even the budget limit.

ABSTRACT L.—Communications and buildings from commencement:—

Description of work.	Cost up to 1887-88 less percentage for depreciation.	Cost during 1887-88.	Cost during 1888-89.	Total from commencement.
		RS.	RS.	
Road and bridge repairs ..	Not yet ascertained.	4,610	4,656	..
New roads and bridges ..	Do. ..	9,414	11,689	..
Building repairs	Do. ..	5,593	4,183	..
New buildings	Do. ..	11,714	14,516	..
Other work repairs	Do. ..	778	584	..
New other works	Do. ..	379	220	..
Total ..	..	32,488	35,848	..

The new roads and bridges and buildings during the year consisted of—

In Chingleput, a tiled rest-house at Sattiavedu and two tannah houses in the Saidápet range.

In North Arcot, the completion of a bridge at Amerdi. This bridge was designed by Mr. Dwyer, Assistant Engineer, District Board. It consists of two masonry piers with a waterway of 17 feet; in the centre railway rails bolted together with timber between, span the waterway. It was well built so as to stand the floods The outlay was about Rs. 2,000. Carts can now go 4 miles further up the valley to the Amerdi forest, which is a most important one.

In South Arcot, continuation of work on the Tenmalai ghât road and of the extension of rest-house, and the partial construction of a Range office at Kallakurchi.

In Salem, extension of Hasthampatti bungalow and construction of six huts on the Kollimalais, &c.

In Trichinopoly, partial construction of a rest-house on the Pachamalais.

In North Coimbatore, construction of three rest-houses and six tannah houses in Satyamangalam and Kollegál ranges.

In South Coimbatore, making of roads and bridges for tramway, sinking a well and putting up a new wooden gate for the Coimbatore timber depôt.

In Madura, making of new roads in Alagarmalai, Gundan shola, &c., extension of the rest-house at Uttamapaliyam, construction of cattle and cooly sheds at Gundan shola, a rest-house at Kavalapatti, another at Sirumalai, a Forester's quarters at Balasamudram and a few huts for guards and tannahdars.

In Tinnevelly, tracing and cutting of 5 miles of bridle path from Sengalteri to Kariar in the Nángunéri taluk, widening and reducing the gradients of the Pápanásam ghât road at the first zig in the Ambásamudram taluk, making 2 miles of bridle path at Kaludaikadavu and 5 miles of inspection paths in Sankaranainárkovil taluk, and tracing 2 miles of the Alagarkovil bridle path in Srívilliputur taluk, completion of the Ranger's office at Vásudevanallúr and of the rest-house at Kalivilaipet, re-roofing, &c., Kannikotai Odei bungalow and construction of foresters' and clerks' houses at Kannikotai, a forester's office at Kalakad, a forest guard's house at Kariar, a watcher's house and four watch huts.

In North Malabar, completion of the forester's serambi at Kanôt and of the seed house and office in the experimental garden at Manantoddy, construction of a substantial inspection lodge in the Tirunelli forest and of a few huts.

In South Malabar, construction of 1 mile of road from the high road to new forest bungalow, 1 mile of road 12 feet wide, with side drains leading from high road to Wálayár chappa, and compartment roads in Wálayár, completion of the District Forest Officer's bungalow at Nilambur and erecting a small building for a range office at Pálghat.

In South Canara, construction of a tannah house.

23. *Tramways.*—Nine miles of tramway referred to in the previous annual report arrived during the year.

In North Arcot, the tramway was laid from the Virinjipuram casuarina plantations to the Virinjipuram Railway Station—about 2 miles. The Acting Conservator

(Mr. Cherry) who had inspected it in January last remarked that it was rather hurriedly and roughly laid, but expected that the District Forest Officer would improve the permanent way from time to time. He was instructed to grease or paint the metal parts of the trucks—six in number—machinery, bolts, &c., to prevent their getting rusty. The District Forest Officer had about 100 tons of fire-wood carried on this line between October and January. He says it formerly cost him from Annas 8 to Annas 12 per ton for carriage, in bullock carts, but in the tram it cost only Annas $1\frac{1}{2}$ per truck load (exclusive of interest on capital outlay), a truck holding from 1 to $1\frac{1}{4}$ ton. The tram in North Arcot cost Rs. 10,000 *plus* about Rs. 500 for carriage and laying. The District Forest Officer estimated to carry 20 tons a day.

The 7 miles of tramway obtained for South Coimbatore cost Rs. 51,000 (delivered in the forest). Owing to its late arrival, the District Forest Officer was able to lay only 3 miles. Much difficulty was experienced both on account of the number of curves and of the steep gradients. The Acting Conservator (Mr. Peet) inspected this line quite recently. The difficulty in the curves lay partly in the fact that only the set curves sent out from England were employed at first, and there was a difficulty in fitting the line to the road; in fact the road had in many cases to be fitted to the line. The rail-bending machine was not properly understood, and broke.

Besides this, there was much difficulty experienced in getting the proper super-elevation for the outside rail at the curves: the trucks were constantly derailed at these curves, and the District Forest Officer attempted in some cases a super-elevation of over 4 inches to remedy this, but not with complete success. In short, there was so much difficulty experienced that it was judged advisable to apply for a professional engineer. The services of a capital practical Engineer, a Mr. Eden, have been obtained from Messrs. Fowler and Co., Calcutta, through Messrs. Leighton and Co., Madras; and the line is proceeding rapidly and satisfactorily. He has reduced the super-elevation of the outer line at the curves to under 2 inches, having discovered that one main reason for the constant derailment was two-fold, for, in the first place, the rails were in many cases too wide, and, in the second place, the centre of gravity was too much displaced if there was excessive super-elevation; for the springs on one side of the trucks were abnormally depressed, especially with a heavy weight upon them. He has successfully repaired the rail-bending machine, and is making much longer curves, and is fitting the line to the road. A great difficulty still remains, however, viz., the question of brakes. A special brake was sent out, which is, however, practically useless. This brake is fitted on to a special carriage, not on the trucks containing the timber. It is worked by a horizontal wheel and consists simply in a downward pressure on the line by means of a screw: in fact, as the Engineer said, it is to all intents and purposes a screw-jack, and the pressure on the line is equal to the weight of the carriage and no more. If excessive force is used in turning the horizontal wheel, the result is simply to raise the wheels of the carriage above the line altogether. On Mr. Porter's representation, Messrs. Fowler and Co. sent out *gratis* some block brakes to fit on to the timber trucks, but it is doubtful if sufficient force can be placed on the side levers, when the carriages are in motion. The whole question is engaging the attention of the Engineer. Another difficulty has also presented itself, viz., that, especially when the line is slippery, the wheels over when completely blocked, sometimes slide over the line, without gripping. A further question is that of the up-draught of heavy timber. This is a serious question about which no final decision has been reached. The Acting Conservator has proposed, for consideration, the question whether both the up-draught and the dangers of descent of steep gradients cannot be provided for by having a series of drums let in at intervals beside the line, similar to those used for the ropes of anchors. The suggestion was at first scouted, but will be considered. This matter has been gone into at length, because it may be of interest to record preliminary difficulties. Many of these would be overcome if we were allowed to deal direct with Messrs. Fowler's agents in this country, for it is understood that had we bought the plant from these instead of through the India Office, they would have lent an Engineer to give instructions about setting up the line.

CHAPTER V.

YIELD AND WORKING.

24. The total yield for the year as compared with that of the former year is shown in the following abstract, which has been prepared in accordance with instructions conveyed in para. 16 of the Government Order on the previous annual report.

ABSTRACT M.—Comparative yield.

Heads.	TIMBER IN CUBIC FEET INCLUDING SANDALWOOD.		FUEL IN CUBIC FEET.		BAMBOOS IN NUMBER.		MINOR PRODUCE IN MAUNDS OF 25 LB. EACH.	
	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.
By Government agency	138,360	(a) 165,977	376,880	511,935	47,600	(b) 19,521	37,811	30,433
Do. Purchasers ..	1,108,440	1,266,812	5,999,040	7,779,800	5,446,800	6,183,415	2,324,672	1,353,497
Free grants	50,360	7,824	4,520	640	113,800	17,154	9,856	896
Total ..	1,297,160	1,440,613	6,380,440	8,292,375	5,608,200	6,220,090	2,372,339	1,384,826
Difference in 1888-89 as compared with 1887-88.	+ 143,453		+ 1,911,935		+ 611,890		— 987,513	

(a) Includes 623 cubic feet being excess found on re-measurement of timber collected and taken to depôt in previous year.

(b) Includes 3,660 bamboos purchased for rafting purposes.

There was an increase in the total yield of a little over 10 per cent. under timber and bamboos, and about 30 per cent. under fuel, and of a decrease of about 40 per cent. under minor produce on the previous year's totals. The differences will be explained under the heads to follow.

Section 1—*Departmental Operations* (*Appendices* 68, 69, 70, 71 *and* 73-A).

25. The following comparison of trees felled departmentally is given :—

ABSTRACT N.—Trees felled and converted (see Appendix 68).

Balance brought forward.	Felled, 1887-88.	Felled, 1888-89.	Converted, 1887-88.	Converted, 1888-89.	Balance carried forward.
430	4,417	4,438	4,809	4,175	351

The difference between the number of trees felled during the two years is trifling and calls for no remark.

26. The following abstract compares the produce collected and disposed of by the department with that of the previous year :—

ABSTRACT O.—Produce collected and disposed of (see Appendices 69, 70, 71 and 73-A).

Produce collected.	BALANCE BROUGHT FORWARD.	DURING 1887-88.			DURING 1888-89.		
	Quantity.	Quantity.	Cost.	Average.	Quantity.	Cost.	Average.
			Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	235,130	137,280	45,243	0 5 3	164,560	44,831	0 4 4
Firewood .. .. ,,	52,035	376,880	16,759	0 0 9	511,935	15,169	0 0 6
Bamboos .. .. No.	30,199	47,600	216	..	19,521	198	..
Sandalwood .. .. .. C. ft.	853	1,080	1,193	1 1 8	1,417	1,411	0 15 11
Minor produce in maunds of 25 lb. each.	197	37,811	28,296	0 12 0	30,433	34,762	1 2 3
Total ..	..	..	91,707	..	..	96,371	..

Produce disposed of.	During 1887-88.			During 1888-89.			Balance carried forward.
	Quantity.	Sales.	Average.	Quantity.	Sales.	Average.	Quantity.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.	
Timber .. .. C. ft.	165,131	1,08,660	0 10 6	208,241	1,28,394	0 9 10	163,598
Firewood .. .. ,,	393,080	40,729	0 1 8	489,958	45,145	0 1 6	57,812
Bamboos .. .. No.	68,000	852	..	19,444	1,603	..	9,876
Sandalwood .. .. .. C. ft.	120	690	5 12 0	1,657	10,564	6 6 0	1,573
Minor produce in maunds of 25 lb. each.	31,629	36,439	1 2 5	34,365	67,102	1 15 3	2,447
Total ..	..	1,87,370	..	..	2,52,808	..	..

The most satisfactory feature in the year's operations under this head is that, besides the marked improvement in revenue under all sub-heads (without a proportionate increase under expenditure) as compared with the previous year's figures, the net results were even more favorable than those provided for in the revised budget estimate for the year as may be seen from the following figures:—

—	Receipts.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
As per revised budget	2,53,165	1,09,995	1,43,170
Actuals as per Form No. 64 ..	2,48,244	96,371	1,51,873
Difference ..	— 4,921	— 13,624	+ 8,703

The rates for collecting timber, firewood and sandalwood were lower and for minor produce higher than last year, the latter being due to the collection of large crops of wild mace and cinnamon flowers in South Canara. The mace crop is the first large crop for several years, and the cinnamon crop was unusually large.

The reduction in the average cost of collecting timber and firewood and the reduction in the average selling prices are probably due to some extent to more systematic working of forests by contractors under departmental supervision, the contractor agreeing to fell the yearly coupes and buy the produce. Improved communications have also, it is hoped, tended towards a reduction of both cost and prices.

There were no indents during the year from the Department of Public Works either for timber or firewood: 1,847 tons of firewood were supplied to the South Indian Railway Company.

The value of stock balance in depôts (Appendix 73-A) was Rs. 52,290 as against Rs. 53,780 at the commencement of the year, showing a reduction of stock balance to the amount of Rs. 1,490.

Section 2—Removals by Purchasers (Appendix 72-A).

27. The following abstract exhibits the removals by purchasers under permit or license, as compared with the previous year:—

Abstract P.—Produce removed by permit-holders (Appendix 72-A).

Produce.	During 1887-88.			During 1888-89.		
	Quantity.	Amount of sales.	Average.	Quantity.	Amount of sales.	Average.
		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Timber .. .. C. ft.	1,094,990	99,254	0 1 5	1,259,671	1,12,860	0 1 5
Firewood .. .. ,,	5,989,320	1,58,623	0 0 5	7,766,040	1,77,363	0 0 5
Bamboos .. .. No.	5,441,200	76,545	0 0 3	6,175,415	80,314	0 0 2
Grass and grazing	..	45,918	0 0 0	..	52,331	0 0 0
Minor produce in maunds of 25 lb. each	2,318,848	2,24,222	0 1 7	1,349,555	2,12,297	0 2 6
Total ..	..	6,04,562	..	..	6,35,165	..

The actual revenue realized during the year is Rs. 19,180 in excess of the revised budget estimate and Rs. 26,850 more than the previous year's actuals. Compared with last year, about 15 per cent. more of timber, 29 per cent. more of firewood and 13 per cent. more of bamboos were removed during the year, while the sale rates remained almost the same except in regard to minor produce. This indicates that there was no additional taxation. The reduction of over 40 per cent. in the quantity of minor produce is merely nominal and is due to the farming or leasing out of minor produce collections under the contract or auction system having been more largely resorted to during the year. Under this system, quantities collected are not ascertainable. Hence the discrepancy between quantities and rates.

The increase under grazing has been explained in the previous chapter.

11,315 tons of firewood were supplied to railways under this head.

Confiscated Produce (see Appendix 72-B).

28. The confiscations during the year as compared with the year before were as follows:—

ABSTRACT Q.—Confiscation (see Appendix 72-B).

	During 1887-88.			During 1888-89.		
	Quantity.	Amount realised	Average.	Quantity.	Amount realised.	Average.
		Rs.			Rs.	
Timber .. .. .. C. ft.	13,460	..	..	7,141	..	..
Firewood .. .. .. ,,	9,720	..	..	13,760	..	..
Bamboos .. .. .. No.	5,600	..	..	8,000	..	..
Minor produce in maunds of 25 lb. each	5,524	..	..	3,942	..	..
Total ..	..	3,054	..	..	3,733	..

Section 3—Free Grants of Forest Produce.

29. The following exhibits the free grants, made by Forest officers and their value as compared with the last year:—

ABSTRACT R.—Free grants.

Districts.	Timber.	Firewood.	Bamboos.	Minor produce in maunds of 25 lb.	Money value.
	C. FT.	C. FT.	NO.		Rs.
Chingleput	150	..	200	896	20
North Arcot	4,500	..	12,354	..	746
South Arcot	1,363	640	..	..	105
Salem	988	..	4,400	..	300
Madura	153	..	200	..	21
South Canara	670	..	..	..	188
Total ..	7,824	640	17,154	896	1,380
Free grants last year ..	50,360	4,520	113,800	9,856	7,272

The tendency of settlement will be more restrictions in reserves, and more license in unreserved lands; but it is difficult to estimate the amount of the concessions. It is mentioned in the North Coimbatore report that arrangements have been made for the free supply of agricultural and domestic requirements to hill villagers and to villagers at the base of the hills; and it is estimated by the District Forest Officer of South Canara that 30,000 cubic feet of the wood of reserved trees were cut in kumaki land. Permits are required only for these trees; and the proportion of unreserved wood must have been very large.

CHAPTER VI.

Financial Results.

30. The revenue and expenditure of the Circle according to Appendix No. 64 compare with the actuals of four previous years, and with the revised estimate of the year under report as follows :—

Abstract S.—Cash results from 1884-85.

Items.	For 1884-85.	For 1885-86.	For 1886-87.	For 1887-88.	For 1888-89.	Revised estimate for 1888-89.	The year under report compared with the previous year.	The year under report compared with the revised estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue	6,25,492	6,52,318	6,94,535	8,10,197	8,98,086	8,77,000	+ 87,889	+ 21,086
Expenditure.								
A. Conservancy and Works.	2,09,344	2,34,006	3,80,192	3,45,742	4,08,269	4,20,200	+ 62,527	— 11,931
B. Establishments.	2,87,579	3,00,608	3,40,529	3,28,981	3,33,863	3,31,000	+ 4,882	+ 2,863
Total expenditure.	4,96,923	5,34,614	7,20,721	6,74,723	7,42,132	7,51,200	+1,67,409	— 9,068
Net results ..	+1,28,569	+ 1,17,704	— 26,186	+ 1,35,474	+ 1,55,954	+ 1,25,800	..	..

The revenue has continued to rise and there was a surplus of Rs. 20,480 more than that of the previous year, notwithstanding the large expenditure during the year of about one lakh of rupees on capital account in connection with the survey of forest reserves and tramways. The revenue and expenditure during the year rose by about 10 per cent. as compared with the previous year. The revenue was about 2 per cent. more and expenditure 1 per cent. less than the revised estimate which is satisfactory.

Towards the cash surplus shewn, Salem contributed 46 per cent., North Arcot, 29 and North Coimbatore, 22.

31. To arrive at a fair conclusion about the working results of the year, the following items may be added to the cash surplus of ... ... Rs. 1,55,954 —

The expenditure on live stock, stores, tools, plant and buildings (Form 73-*b*)	,,	67,074
The expenditure on Settlement establishment, (B charges)	,,	22,766
Do. on demarcation (VIII-*a*)	,,	16,191
Do. on acquisition of lands and right (VIII-*b*)	,,	1,411
Do. on surveys (VIII-*c*)	,,	45,198
Do. on law charges (IX-*b*)	,,	1,580
Increase in outstanding revenue (Form No. 66) ...	,,	8,921
Decrease in outstanding advance (Form No. 65) ...	,,	3,334
Total ...		3,22,429

And deduct—

Decrease in value of depôt stock (Form No. 73-A) ...		1,490

which leaves a balance of Rs. 3,20,939 in favor of the ordinary working account for the year as compared with a similar balance of Rs. 2,23,993 in the previous year.

CHAPTER VII.

General Remarks.

32. *Forest School.*—The two students (Foresters Tapp and Surappaiyar) of the batch sent in 1886-87 had returned in July 1888 with Ranger's certificate. The three Foresters (Messrs. Ryan, Mascuronhas and Soobramanya Aiyar) deputed to the school in 1887-88 also obtained Ranger's certificate but returned in April 1889. All these Foresters were promoted to the Ranger's class on arrival, excepting Mr. Ryan who has yet to pass the hand-writing test.

During the year under report a probationary Sub-Assistant Conservator (Mr. Woutersz) and two Rangers (Messrs. Thomson and Rama Rao) were deputed, but Mr. Woutersz was sent back because the Doctor there stated that the climate would affect his lungs.

33. *Conduct of the establishment.*—The services of two Rangers on probation were dispensed with as they failed to pass the departmental tests and were otherwise found unsuitable. One Ranger was placed under suspension for three months for having borrowed money from villagers within his jurisdiction; another was reduced two steps in his grade for carelessness; while a third was under suspension at the close of the year pending investigation of the charges against him. The services of a Forester on probation were also dispensed with and two others suspended for misconduct and neglect of duty.

34. *Health of establishment.*—One superior officer (Mr. Wooldridge) died, and a special report explaining cause of death, &c., was sent in—*vide* Board's Proceedings, dated 4th March 1889, Forest No. 163, Mis.

The health of the subordinate establishment was poor as usual. Fever was prevalent in all districts except Chingleput, South Arcot, Tanjore and Madura. In North Arcot, two Forest Guards died at the foot of the Javadis, one Ranger and two Foresters were laid up with fever more or less all the year round. In South Arcot, one Forest Guard died of cholera. In Salem, two Foresters died and the health of the rest of the establishment was indifferent. In Trichinopoly, the District Forest Officer, a few Range-officers, guards and watchers were laid up with malarious fever, and one tannahdar died of cholera. In North Coimbatore, one Ranger died of fever and several Forest Guards, clerks and peons were laid up with it for periods varying from 1 to 4 months. In South Coimbatore, there was much sickness at Tunakadavu. One depôt-keeper, one mahout and two office peons died from the effects of fever. The whole of the subordinate establishment except guards selected from jungle tribes suffered more or less from fever, owing to the partial failure of both the monsoons. In Madura, two Forest Guards died. In Tinnevelly, there was cholera on the Pápanásam hills, besides fever from which the establishment suffered severely. In North Malabar, fever and dysentery was very prevalent. In South Malabar, all suffered from fever as usual.

35. *Service Books.*—A system of annual verification of service registers was initiated during the year under the orders of Government, and out of a total of 652 employés (subordinates) in this Circle, the services of 439 men were verified, leaving 213 to be done during the current year.

36. *Wild Elephants.*—These are found to be largely increasing on the Animalais in South Coimbatore. They are said to be stationary on the hills. A large female and young bull calf were killed in July in the leased forest by a tree falling on them: this fact has been verified.

In North Malabar (Wynaad) one elephant was captured in an elephant pit-fall, and is doing well and is nearly trained; another elephant was captured in a bison pit-fall, and is also doing well and has been trained.

APPENDIX.

Details of Experiments with Exotics during and up to the close of the official year 1888-89.

Dates.—Of the date palms raised from seeds specially imported from Busrah in 1886, there are 91 plants (9 feet apart) in North Arcot, measuring from 9 inches to 2 feet high and doing well, 126 in South Arcot, all of which are reported to be thriving, except those in Tiruvannámalai, and 311 in Nilambúr, South Malabar, averaging from 9 to 22 inches in height.

The experiment with the bazaar date fruits has been continued on a moderate scale. The following table will exhibit the year's operations:—

District.	Quantity of seed supplied from west.	Locality where sown.	Remarks regarding germination.	Other remarks.
Chingleput ..	5 lb.	Homes' garden at Saidápet.	165 seeds germinated	The plants are from 1 to 9 inches high and are said to be flourishing.
North Coimbatore.	6 ,, ...	..	Most of the seed germinated within 6 weeks.	Average height of plants being 5 to 6 inches.
Trichinopoly ..	900 seeds ..	Manatattai and Elamanúr in the Cauvery padugais.	90 per cent. germinated.	127 plants were transplanted at Kulitalai, of which nearly one-half died.
..	800 ,, ..	Pachamalais ..	50 per cent. do. ..	About half the number of seedlings perished in the nursery, probably from over-watering.
..	127 ,, ..	Office compound at Turaiyúr.	85 do. do. ..	....
North Malabar..	A large quantity.	Wynaad	90 do. do. ..	Seedlings grow well, but more than half was destroyed by white-ants.

The plants raised in 1887-88 by the District Forest Officer, Chingleput, from the seed of fruits purchased at the Madras Agri-Horticultural Show, have been transplanted and are doing well.

The inquiry instituted with reference to the date palms which Mr. Morgan reported last year to have planted some years ago in Trichinopoly and North Coimbatore, resulted in the discovery that they do not now exist there.

Some fresh seeds of different kinds of the Persian and Egyptian date palm were received towards the close of the year from the Director, Botanical Department, Saharanpúr, and distributed to eight districts.

In Chingleput, 25 tolas of Persian date-seeds were sown, of which 20 germinated after thirty days and the seedlings look healthy. The remaining seeds have not yet germinated. Two seeds of each of the Egyptian variety also germinated and the seedlings are doing well. The seeds sent to South Arcot are reported to have successfully germinated. They were sown in small pots, 6 inches high, to facilitate transplanting, and 90 per cent. germinated. In Nilambúr also the seeds were put down in pots and have, without exception, germinated. The result of the sowing in the other districts is awaited and will find place in the report for 1889-90.

Date off-sets.—The following table exhibits the experiments with the date off-sets obtained from Busrah in 1886-87 and the result, as far as can be gathered from the available data, is not discouraging:—

District.	Number received and put down in 1886-87.	Number of casualties in 1886-87.	Number of casualties in 1887-88.	Number of casualties during 1888-89.	Number existing at the close of 1888-89.	Percentage of casualties during 3 years.	Remarks.
Chingleput ..	113	4	32	12	65	42	(*a*)
North Arcot ..	100	5	2	..	93	7	(*b*)
South Arcot ..	100	5	..	..	95	5	(*c*)
Trichinopoly ..	124	4	4	6	110	11	(*d*)
Tinnevelly ..	74	..	43	..	31	58	(*e*)
Malabar (Wynaad) ..	6	..	1	..	5	17	(*f*)

(*a*) Doing well and looking healthy. The twelve that perished during the year were killed by insects boring through the stem of the seedling. Some of the insects were collected and sent to the Director, Forest School, at the instance of the Conservator.

(*b*) All the plants have made good growth and most of them have thrown out off-sets which will shortly be separated and planted by themselves.

(*c*) No report from District Forest Officer.

(*d*) Thirty-two plants were removed to Pachamalais, and put out close by the village of Kenattur. Of these, six died, while the rest have established themselves and are throwing out new fronds.

(*e*) No report from District Forest Officer.

(*f*) Growth during the year not satisfactory.

In Tanjore, the 175 plants that survived the planting of 1881 in the Vettangudi forest are thriving well, and of these, four have borne fruit. The surviving nine off-sets transplanted during 1886-87 in the same forest promise good growth. Ten off-sets were planted in January 1889. They have taken root and are throwing out new shoots.

Out of the 60 date plants that remained at the close of last year in the Meltottam, west block (Vedaraniam forest), three have flowered during the year. Ten off-sets from these plants were transplanted in the Meltottam, east block, of which five died, possibly owing to excessive heat, but more probably because the plants were too old when transplanted and planted too late in the season.

Divi Divi.—In North Arcot there is about ½ an acre of this tree in Kilminnel. The plants are 4 years old and 6 or 7 feet high. They have not seeded yet. In Madura, the plants in the Navinipatti garden are doing well.

Edible Cactus.—In Tinnevelly these plants continue to do fairly well on dry sandy soil in the Tenkarai taluk. The growth, however, is very slow.

Ensilage.—Two silos were formed in the Chingleput district—one in September and the other in December 1887. The former was opened in May 1888, and the result was satisfactory. The latter was opened in July, but with unsatisfactory result, which, it is understood, is due to the delay in opening it.

The question of ensilage still appears to be in its experimental stage, and the Board issued a set of instructions for properly conducting the experiment.

Erythroxylon Coca.—In Tinnevelly these plants are doing well. Many have flowered and fruited during the year, those at an elevation of 600 feet being the most vigorous.

Eucalyptus.—With their Proceedings, dated 24th September 1888, No. 524, the Board of Revenue (in the Settlement, &c., Department) sent seeds of *Eucalyptus* to the District Forest Officers of North Arcot, South Arcot, Madura, Tinnevelly and Malabar with instructions to sow them under proper conditions in suitable places and to do their best to solve the question whether these varieties could be successfully grown on the plains. The District Forest Officer, Chingleput, also appears to have obtained some seeds through the Collector. All the District Forest Officers, excepting Madura and Tinnevelly, have reported on the experiment. The results have not been, generally speaking, satisfactory, most of the seedlings having died shortly after their appearance.

In the Chingleput district, although all the seeds sown in Homes' garden germinated, only two plants survive and are 2 and 3 inches in height. In North Arcot 21 plants, 9 to 15 inches of *Eucalyptus Globulus,* survive, but it is feared that these will also die out. Fifty seedlings of *Eucalyptus teriticornis* were transplanted in South Arcot from nursery beds into cylindrical earthen pots and put out when they attained a height of 6 to 9 inches. Only five of these survive. In Wynaad 147 plants were raised and are growing vigorously. They are 1¼ to 8½ inches high.

The *Eucalyptus* plantation near Palmanér, in North Arcot, is doing well. There are five or six varieties. Some of the *Eucalyptus Globulus* are 40 feet high. One kind grows more like a bush and has seeded for the last three years. The name of the species is not known, but the capsule is cone-shaped with a flat base about one inch diameter. The District Forest Officer will be asked to send specimens of leaves and seed for the purpose of identification.

There are two fine specimens of *Eucalyptus Globulus* over 40 feet high in a private land at Tindivanam cusbah in South Arcot. It is said that these were planted some 18 years ago by a Missionary.

In Wynaad, the five trees of *Eucalyptus saligna* have continued to flourish. No borer has appeared again and the trees seem to have entirely recovered from the attack of 1887. The dimensions of the largest of the several species are :—

	Height.	Girth
	FEET.	FEET.
No. 1	50	2½
„ 2	42	2⅙
„ 3	35	2 1/12
„ 4	32	2

Specimens of flower of the second species and of the capsules were sent to the Government Botanist, Ootacamund, who was of opinion that this species is " probably *Eucalyptus rostrata.*" There are 20 trees of this species averaging 40 feet in height and 2¼ feet in girth at 4 feet from the ground. The trees are tall and slender and the growth fair; but they are not nearly so robust or vigorous as the five large trees which are supposed to be *Eucalyptus saligna.* There is one fine tree of the third species growing vigorously, which requires identification, but it has not flowered yet.

Fourcroya.—In Madura all the plants put out on one of the fire-lines in the Alagarmalai reserved forest are growing well.

Giant Bamboos, &c.—*Dendrocalamus Brandisii* has been a great success in Wynaad, the largest clump in the experimental garden nursery at Manantoddy growing apace. The year's shoots average 65 feet high with a circumference of 1 foot. There are besides 1,016 clumps

which have been planted out and are growing satisfactorily. These plants were raised from the last batch of seed received in 1887. The clumps average 6 feet in height, the largest being 13 feet high with an average girth of individual stems of 3½ inches.

Seven hundred plants were carted to Begúr and planted out at Cooger Hadi last June. These plants have not done so well as those put out at Manantoddy as the rain ceased immediately after they were put out and a fortnight's very hot weather intervened.

In Kanot, the six large clumps raised from cuttings, which last year averaged 20 feet in height, have made very vigorous growth this year, the annual shoot being 45 feet in height with an average girth of 11 inches. One clump died out, but 60 cuttings were made from the remaining five, of which 34 took and are growing well.

Dendrocalamus longispathus.—Three thousand plants of this species were raised during the year in Kanot from a portion of the seed obtained from Busrah and supplied from the Conservator's office. They average 2 feet in height and are growing vigorously. The old plants (4 years old), of which there are now 63 clumps, continue to flourish. The balance of the seed was sown in the seed-house at Manantoddy and in beds. Four thousand plants were raised and transplanted into nurseries at Begúr, where they now average 1 foot in height.

Cephalostachyum pergracile.—The old clumps of this species put out in 1885 continue to flourish, but the growth is slow, compared with the other two species mentioned above. There are 13 clumps now alive averaging 17 feet high with a girth of 8 inches in individual culms. From the seed sent from the Conservator's office during the year, obtained from Burmah, 3,000 plants were raised at Kanot and transplanted into nurseries. These plants average 18 inches in height and are growing well. Two thousand five hundred plants were raised at Manantoddy and transplanted into the Begúr nursery, but their growth has not been so rapid as in the case of *D. longispathus*. The plants average 10 inches high and look healthy. They have been somewhat stunted by the repeated attacks of hares at night time.

Beesha travancorica.—Of the 914 plants put out in Kanot last year, only 500 are now in existence, white-ants and cattle having destroyed the remainder. These plants are now 10 feet in height and their culms average 2½ inches in circumference. There are 100 clumps planted out in the experimental garden at Manantoddy at the same time which average 20 feet in height with a girth of 2¾ inches. These clumps are exceptionally vigorous and handsome.

Golden Burmah Bamboo.—The eight clumps of this beautiful species have grown vigorously during the year, the tallest shoots of the year averaging 30 feet with a girth of 8 inches. One clump planted in Kanot is now 20 feet high with a girth of culm 7 inches at the base.

The planting up of tukkuls (forest land cultivated by indigenous tribes) with giant bamboos in Kanot and Wynaad is being extended

In South Malabar (Nilambúr) the Burmah bamboos (*Arundinaria Brandisii* and *Dendrocalamus longispathus*) continue to grow well. The one large clump planted in 1879 now contains about 154 stems. The large yellow bamboo clump and the four cuttings raised from them are also doing well.

The seeds of *Cephalostachyum pergracile* and *Dendrocalamus longispathus* obtained from Burmah and supplied by the Conservator during the year have been sown in Panangod. The germination was fair and the seedlings will be planted next season.

In South Canara a few giant bamboo cuttings were put out along the river bank at Parappa and have established themselves. About a 100 cuttings more and a few in Uppinangadi have been raised for planting out in June.

Ipecacuanha.—The two plants in Kanot (Wynaad) have made but poor growth. Of the twenty plants planted in Nilambúr in 1884, one was pulled up by Mr. Lawson for observation and the remaining 19 look healthy and are from 17 to 33 inches high.

Five hundred plants were planted by Mr. Lawson at Ayaravillikava in July 1888. Their height varies from 6 to 9 inches.

Kigelia pinnata.—In North Arcot the *Kigelia pinnata* seed received from the Honorable Mr. Whiteside germinated well and there are now trees all over the district grown from that seed. Some of the plants in good soil are 20 feet high, but most of them are 12 to 15 feet.

Lancewood.—In Wynaad these plants were potted last year. They have made little or no growth, and only nine survive. Of the 25 planted the previous year in Nilambúr, only five remain in Valluvasheri. These look wanting in vigour and their average height is 6 inches.

Mahogany.—Of the stock of seedlings in Chingleput, 16 per cent. died during the year. The rest are reported to be doing well. Of those in North Arcot, 23 plants (3 year's old) are said to be growing well, their average height being 8 feet. The plants in South Arcot continue to look healthy.

In Trichinopoly the mahogany plants received from the Agri-Horticultural Gardens, Madras, in 1886, are from 7 to 14 feet in height and 4½ to 6 inches in girth. The plants raised from seeds received in the same year are from 2 to 7 feet in height and 1¾ to 3 inches in girth. Borers and grass-hoppers attacked the imported plants, but disappeared after a fall of rain. The District Forest Officer fears that mahogany will not do well in the district.

In Tanjore there were but two casualties during the year. The existing plants show the following growth :—

Year in which planted.	Height.	
	Maximum.	Minimum.
	FT IN.	FT. IN.
1881	17 0	9 0
1886	10 0	2 0
1887	4 10	0 11

The experiment with mahogany in the Madura district is reported to be a decided success. The plants at Periyakulam outside the Forest office building have grown very well. Those at Vanattiparai and Tandigudi are in healthy condition, but the growth is slow. In Tinnevelly, the plants in the Kongarayakurchi and Kaliyavur reserves continue to thrive well. Some casualties have, however, been occasioned by borers and other insects.

In Wynaad, of the 198 plants reported to be alive last year in Kanot, 78 died from attacks of the borer, leaving 120 still in existence These average a height of 4½ feet with a girth 2½ inches at base. Though healthy they are not robust. The largest of the few 6-year old plants in the teak plantation is now 25 feet high with a girth of 7 inches at the base. The District Forest Officer reports that "on the whole the mahogany has succeeded, but poorly in the Malabar district, which is mainly due to the persistent attacks of the moth, and, in a less degree, to that of borers, the larvæ of a Longicorn beetle, which is very destructive to the larger trees. The largest mahogany tree in the experimental garden which was 25 feet in height and growing more vigorously than any of the other was killed in November by the beetles. As for the balance of the mahogany plants in the garden, they look very poor and stunted, averaging 7 feet in height with a girth at the base of 4 inches. The moth has persistently attacked these unfortunate trees and there is little hope of their ever reaching any size. Kanot seems to me to offer the best field for the further prosecution of experiments with this valuable tree, as the moth is much rarer there and not so persistent in its attacks."

In South Malabar (Nilambúr) the largest mahogany tree made better advance in size during the year. The subjoined table will show the rate of growth of this tree :—

—	Height in feet.	Girth at base in inches.	Girth at 5 feet in inches.
10 years of age or at commencement of 1883-84 ..	65	42	30
11 do. do. of 1884-85 ..	67	47	34½
12 do. do. of 1885-86 ..	69	52	41
13 do. do. of 1886-87 ..	70	56	44
14 do. do. of 1887-88 ..	71	60	46
15 do. do. of 1888-89 ..	74	64	50

This tree is in Chitambarai and appears to have escaped the attack of the borer. The other plants in Ayaravillikava, Ramabis and the plantation at Panangod have suffered most severely from the attacks of the borer throughout the year.

Manilla hemp.—Of the six plants put out in 1888 in the Forest office compound in South Arcot, three bore fruit during the year. The fruit is not edible. In Tinnevelly the plants are all in a healthy condition, but have not flowered. They, however, throw offshoots which are being transplanted. In Wynaad, the plants continue to grow luxuriantly.

Olea europæa.—Twelve of these plants in Wynaad have been potted. They have made no growth, having suffered seriously from the attacks of a caterpillar which destroyed all the leaves.

Peltophorum ferruginium.—The twenty-four plants that remained in the Vettangudi forest, Tanjore district, at the commencement of the year, are in good condition. They are from 6 to 28¾ feet high with a girth of ¾ to 1¾ feet.

Pithecolobium Saman.—This tree is now very common in the North Arcot district and goats and cattle eat away the pods as they drop. If the tree does not answer for timber or fuel, it is still an excellent shade tree; sown easily from seed or cuttings, in any soil, withstands drought and soon covers the ground under it with a thick coat of decayed leaves which greatly improve the soil. In South Arcot, there are 144 plants and they are in good condition. In Wynaad the large tree in the experimental garden swamp continues to flourish. It is now 36 feet high with a girth of 3 feet at 4 feet from the ground. The other 142 trees in the experimental garden have grown more satisfactorily during the year as their roots have got into the sub-soil.

RUBBER EXPERIMENTS — *Hevea braziliensis.*—The two trees of this species in the experimental garden at Manantoddy in Wynaad have continued to show fair growth, one tree being now 20 feet in height by 7 inches in girth, and the other 18 feet in height by 4 inches in girth. The District Forest Officer says "I do not think that any rubber trees that grow into large forest trees like the Hevea and Castilloa are fit to be tapped till they have reached maturity, that is, in their 40th or 50th year. They should be treated like *Ficus elastica.* It would be an excellent plan to make small plantations in suitable places of ¼ of an acre or so, or plant groups of trees, and scatter these groups through the ghât forests and trust to birds and animals distributing the seed."

Ficus elastica.—The largest *Ficus elastica* in the experimental garden at Manantoddy is 20 feet high with a girth of 1½ feet at the base. The 190 plants of this rubber planted in June 1886 now average 4 feet in height and 3 inches in girth at the base. The plants have made but poor growth, but the soil is indifferent.

The plants put out in July 1887 in Aranapoyil, in the Kanot range, average 4½ feet in height with a girth of 3 inches at the base. The growth has not been so rapid as was expected, but the plants are all healthy. There is also a small stock of young plants, about 200 in number, raised from cuttings ready for transplanting.

Six plants were planted round the serambi in the Mukki cardamom forest. The average height of these is 3¼ feet with a circumference of nearly 3 inches at the base. They look exceptionally vigorous and healthy and the locality seems to suit them.

Twelve plants were planted in the Chedlet forest at Kuppadi in open grass land. They have grown splendidly considering the situation which is very exposed. The largest plant is 8 feet in height by 5½ inches in girth at the base. The three plants put out in the Kurichiyat forest have grown equally well and vigorously.

The Ceara.—This rubber covers a considerable area of the experimental garden at Manantoddy. The largest tree is 34 feet high with a girth of 3 feet at 4 feet from the ground. This species produces very little rubber, trees exhaustively tapped yielding only an ounce or two at the most. Rats, pigs and porcupines find the tuberous roots most tempting and do great damage in consequence. The seeds contain much oil and are shed in great abundance. The nurseries contain a fair stock of young plants.

Landolphia florida.—The 35 plants received from the Agri-Horticultural Society, Madras, in April 1888, were at once planted at Ayaravillikava (Nilambúr). Their average height is one foot.

All the different kinds of rubber trees in Nilambúr continue to be doing well.

Sappan wood (*Cæsalpinia sappan*).—Two thousand plants of this valuable dyewood are still alive in Wynaad. These are the plantings of 1886 in Kanot. They average 1½ feet in height with a girth of 1 inch at the base. 5½ lbs of seed were sown in beds at Kanot and germinated freely. Eighty-two seeds were sown in tukkuls and the greater portion of the seed germinated well, the plants now averaging 9 inches in height. Five-hundred plants were lifted from the nursery to supply failures in tukkuls. These transplants have done better than seedlings raised *in situ.*

Silk.—A special officer (Forest Ranger Mr. N. M. Rego) was appointed to arrange for the collection of Tassar silk cocoons in the jungles and the rearing of worms by jungle tribes. His operations were confined to the Chingleput district. His report on the subject is now before the Board, in the Department of Settlement and Records and Agriculture.

The District Forest Officer, Salem, supplied a few silk cocoons during the year to Mr. Hamilton Holmes in Madras.

Walnuts (*Belgaum*).—There are 18 seedlings of this plant in South Arcot, and they are in a fair condition.

Annual Form No. 59-A

Forest Department, Madras, Southern Circle.

Area of Reserved Forests, 1888-89.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput	Saidápet	Tandrai	664	..	..	..	664	..	....	
	Chingleput	Tirukalikundram	697	..	..	..	697	..	....	
		Uragadam	540	..	..	..	540	..	....	
		Madayatúr	697	..	..	..	697	..	....	
		Vandalúr	3,207	..	..	..	3,207	..	....	
		Vallam	..	..	1,328	..	1,328	..	G.O., No. 204, dated 9th March 1888.	From 59 D. "Reserved Lands."
	Tiruvallúr	Kámbákam	11,951	..	..	..	11,951	..	....	
		Ambakam	5,259	..	..	..	5,259	..	....	
		Sativédu	6,859	..	..	..	6,859	..	....	
		Aradúr	2,680	..	..	..	2,680	..	....	
		Kadúr	2,494	..	..	..	2,494	..	....	
		Ugumudi	2,884	..	..	10	2,874	..	G.O., No. 2399, dated 23rd April 1888.	* Correction.
		Nágalápuram	8,345	..	..	..	8,345	..	....	
		Allikuli	5,649	..	..	..	5,649	..	....	
		Alamadi	1,263	..	..	..	1,263	..	....	
		Pulrambakam	..	..	577	..	577	..	G.O., No. 355, Revenue, dated 18th May 1888.	From 59 D. "Reserved Lands."
		Vembédu	..	..	1,075	..	1,075	..		
		Total	56,189	87·80	2,980	10	59,159	92·44		
North Arcot.	Vellore, Pólúr	Carnatic Ghúr	7,069·17	..	..	..	7,069·17	..		Demarcated and surveyed.
		Ammerdi plantation	25	..	..	..	25	..	No. 241, F.S.G.G., dated 18th December 1884.	Demarcated and fenced.
		Ambúr fuel reserve	3,840	..	..	..	3,840	..		Demarcated and surveyed
		Palamadi	6,400	..	..	..	6,400	..	No. 96, F.S.G.G., dated 31st March 1885.	Demarcated.
		Ambúr plantation	5	..	..	..	5	..	No. 241, F.S.G.G., dated 8th December 1884.	Demarcated and fenced.
		Tellai	..	..	15,121·01	..	15,121·01	..	No. 178, F.S.G.G., 3rd July 1888.	Demarcated and surveyed. Transferred from 59 D.
	Chandragiri	Napier reserve	8,772	..	..	..	8,772	..	No. 158, F.S.G.G., dated 16th June 1885.	Demarcated, fenced and surveyed.
		Mamandúr do.	1,776	..	..	..	1,776	..		

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
North Arcot—*cont.*	Chandragiri—*cont.*	Chamala reserve	9,600	..	..	..	9,600	..	No. 158, F.S.G.G., dated 16th June 1885.	Demarcated.
		Panapak do.	6,400	..	..	..	6,400	..		
		Podipatla Bail	2,560	..	..	..	2,560	..		
		Gazerlamándiyam	250	..	..	..	250	..		Partly surveyed and fenced.
		Páradarámi	15,241·83	..	..	198·95	15,042·88	..	Nos. 331 and 332, F.S.G.G., dated 18th December 1888.	Demarcated and surveyed.
	Palmanér and Gudiyátam.	Ambúr drug	5,760	..	..	..	5,760	..	No. 241, F.S.G.G., dated 18th December 1884.	Demarcated.
		Martana	16,000	..	..	..	16,000	..	No. 158, F.S.G.G., dated 16th June 1885.	Demarcated.
		Naikanéri	6,400	..	..	..	6,400	..		
		Musalimadugu	9,600	..	..	..	9,600	..	No. 158, F.S.G.G., dated 16th June 1885.	Demarcated.
		Basvireddipallé	10,240	..	..	..	10,240	..	No. 275, F.S.G.G., dated 2nd October 1885.	
		Peddúr	9,600	..	..	..	9,600	..	No. 158, F.S.G.G., dated 16th June 1885.	
		Palmanér	2	..	..	..	2	..	No. 158, F.S.G.G., dated 16th June 1885.	Fenced.
		Nagamangalam	31	..	..	..	31	..		
		Piduguvaripalle	20	..	..	..	20	..		
		Venkatagirikóta	4	..	..	..	4	..		
		Bireddipalle	4	..	..	..	4	..		
	Gudiyátam	Tiruvalam plantations	435	..	..	..	435	..	No. 241, F.S.G.G., dated 18th December 1884.	Demarcated, surveyed and fenced.
		Virinjipuram do.	260	..	..	..	260	..		Do.
		Chainúr do.	130	..	..	·02	129·98	..		Demarcated and fenced.
		Amundi	160	..	..	..	160	..		Do.
		Tandrayagunta	2	..	..	..	2	..		Demarcated and surveyed.
		Punganúr	3,743·37	..	..	..	3,743·37	..	No. 96, F.S.G.G., dated 31st March 1885.	Demarcated, surveyed and fenced.
	Head-quarter and Arcot	Kilminnel	150	..	..	..	150	..	No. 241, F.S.G.G., dated 18th December 1884.	Demarcated and fenced.
		Vannivedu	30	..	..	..	30	..	No. 158, F.S.G.G., dated 16th June 1885.	Surveyed and fenced
		Arkónam Sub-Magistrate's compound.	5	..	..	..	5	..		
		Arkónam plantation	37	..	..	..	37	..		

Rectification of area.

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot —*cont.*	Javadi ..	Puttúr	..	..	12,800	..	12,800	..	No. 179, F.S.G.G., dated 3rd July 1888.	Demarcated.
		Patrakad	..	..	19,200	..	19,200	..	No. 181, F.S.G.G., dated 3rd July 1889.	Do. Transferred from 59-D.
		Verappanur	..	..	64,000	..	64,000	..	No. 180, F.S.G.G., dated 3rd July 1888.	Do.
	Wandiwash	Brahmakateri	..	..	635·01	..	635·01	..	No. 222, F.S.G.G., dated 31st July 1888.	Do.
		Total ..	124,552·37	194·62	111,756·02	198·97	2,36,109·42	368·92		
South Arcot.	No. I, Tiruvannámalai.	Annamalai forest	1,760	..	..	..	1,760	..	From 1st June 1885, F.S.G.G., dated 2nd June 1885.	Notified under section 25.
		Chinnasamudram	6,018 81	..	..	..	6,018·81	..	From 1st October 1887, F.S. G.G., dated 9th August 1887.	
		Mudinai	4,000·33	..	..	..	4,000·33	..		
		Perungolatur Swamimalai ..	9,000	..	..	..	9,000	..		
		Anandavadi	..	..	6,000	..	6,000	..		Transferred from 59-D.
		Kavutimalai	..	..	6,000·33	..	6,000·33	..	*Vide* F.S.G.G., dated 10th July 1888.	Do. do.
		Tippakodu	..	..	6,001 42	..	6,001·42	..		
		Siruvadi	3,335·31	..	..	..	3,335 31	..	From 1st December 1887, F.S G.G., dated 11th October 1887.	
		Muttakadu	3,094·76	..	..	..	3,094 76	..		
		Karai	1,345·65	..	..	..	1,345·65	..		
		Kurumbaram second bit ..	150	..	..	..	150	..		
		Kilsévúr	1,207·74	..	..	..	1,207·74	..	From 1st February 1888, F.S. G.G., dated 20th December 1887.	
		Saram	251·03	..	..	..	251·03	..		
		Salávadi	70	..	..	..	70	..		
	No. II, Tindivanam ..	Attikuppam	150	..	..	..	150	..		
		Akshikádu	450	..	..	..	450	..		
		Agaram	..	..	601·20	..	601·20	..	F.S.G.G., dated 10th July 1888.	Transferred from 59-D.
		Merkanam	..	..	80·60	..	80·60	..		
		Kumalampet	..	..	1,221·74	..	1,221·74	..		
		Bomnatur *alias* Venmaniyatur	..	..	302 14	..	302·14	..	F.S.G.G., dated 5th February 1889.	
		Jaggampettai	..	..	300·16	..	300·16	..	F.S.G.G., dated 10th July 1888.	
	No. III, Villupuram ..	Gangavaram	8,740	..	..	..	8,740	..	From 1st December 1887, F.S. G.G., dated 11th Oct. 1887.	
		Total ..	39,573·63	61·83	20,507·59	..	60,081·22	93·88		

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem	Salem	Bódamalai	5,600	..	..	..	5,600	..	....	
		Átúr ghât	3,142	..	..	..	3,142	..	....	
		Kutár	3,795	..	..	..	3,795	..	....	
		Nartenchedu extension	1,088	..	..	..	1,088	..	....	
		Yerimalai	3,520	..	..	..	3,520	..	....	Kariyappakombai block, of 265 acres, is fire-protected.
		Pillapallikombai (new)	2,080	..	..	..	2,080	..	....	Pillapallikombai block, of 981 acres, is fire-protected.
		Atúr ghât extension	544	..	..	..	544	..	....	
		Karuvattuparai	1,800	..	..	..	1,800	..	....	Karuvattuparai block, of 837 acres, is fire-protected.
		Nartenchedu	2,400	..	..	..	2,400	..	....	
		Vaniyar	4,512	..	..	..	4,512	..	....	
		Manjavadi ghât	8,461	..	..	..	8,461	..	....	
		Ajampatti	1,920	..	..	..	1,920	..	....	
		Kanavoipudúr	3,200	..	..	..	3,200	..	....	Vadagampatti block of 1,976 acres and Kariyappakombai block, of 266 acres, are fire-protected.
		Lókúr	5,312	..	..	..	5,312	..	....	Morúr block of 799 acres and Ammaneri block, of 252 acres, are fire-protected.
		Kanjéri, new	4,032	..	..	..	4,032	..	....	Kanjéri block of 1,929 acres and Pannikaradu block, of 1,323 acres, are fire-protected.
		Pannikaradu (new)	4,832	..	..	..	4,832	..	....	Pannikaradu block of 1,322 acres, is fire-protected.
		Mallápuram	589	..	..	..	589	..	....	Mallápuram block, of 587 acres, is fire-protected.
	Atúr	Bélúr	6,880	..	..	..	6,880	..	....	
		Nagúr	3,757	..	..	..	3,757	..	....	
		Varagúr	2,675	..	..	..	2,675	..	....	
		Nayakenkombai	2,880	..	..	..	2,880	..	....	

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem—*cont.*	Námakal	Jambútu	2,617	..	..	..	2,617	..	....	
		Puliyan Shola	5,530	..	..	..	5,530	..	....	
	Atúr and Námakal ..	Karavillikombai	8,755	..	..	..	8,755	..	....	
		Pilspadi	8,000	..	..	..	8,000	..	....	
		Tumbakal	7,757	..	..	..	7,757	..	....	
		Chitteri	3,917	..	..	..	3.917	..	....	
		Kottapatti	8,960	..	..	..	8,960	..	....	
	Uttankarai	Puvampatti	4,672	..	..	..	4,672	..	....	
		Chittilingi	6,880	..	..	..	6,880	..	....	
		Singarapet	2,624	..	..	..	2,624	..	....	Singarapet block, of 2,624 acres, is fire-protected.
		Mallápuram extension ..	..	..	400	..	400	..	No. 23, F S.G.G., dated 29th January 1889.	Transferred from 59-D.
	Tirupatúr	Mangalam	6,080	..	..	..	6,080	..	....	
		Nagalatu	2,560	..	..	..	2,560	..	....	Kotúr block, of 1,213 acres, is fire-protected.
		Mambakam	9,370	..	..	..	9,370	..	....	
		Púnkulam	7,834	..	..	..	7,834	..	....	
		Madakadapa	2,048	..	..	..	2,048	..	....	
		Jalárpet	1,216	..	..	..	1,216	..	....	
		Narasingapuram	2,048	..	..	..	2,048	..	....	
		Kalarapatti	2,016	..	..	..	2,016	..	....	
		Alangayam	11,520	..	..	..	11,520	..	....	
	Tirupatúr and Úttankarai.	Singarapet extension ..	7,398	..	..	..	7,398	..	....	
		Aiyúr	5,952	..	..	..	5,952	..	....	Mailgiri block, of 5,461 acres, is fire-protected.
		Marandahalli	5,824	..	..	..	5,824	..	....	
		Gulhatti (new)	7,942	..	..	..	7,942	..	....	Gulhatti block of 3,248 acres and Kanavoikottapalli block, of 371 acres, are fire-protected.
	Hosúr	Manchi (new)	5,632	..	..	..	5,632	..	....	Manchi block, of 3,305 acres, is fire-protected.
		Tolúvabetta	6,918	..	..	..	6,918	..	....	Kanavanagasundram block of 416 acres and Kanavoikottapalli block of 371 acres are fire-protected.

Area of Reserved Forests, 1888-89—*cont.*

District.	Range	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem—*cont.*	Hosúr—*cont.*	Anchetti	8,832	..	..	..	8,832	..	....	
		Natrapalaiyam	10,880	..	..	..	10,880	..	....	
		Biligundla	14,272	..	..	..	14,272	..	....	
		Kestur	11,616	..	..	..	11,616	..	....	
		Bilikal	11,136	..	..	..	11,136	..	....	
		Malahalli	8,928	..	..	..	8,928	..	....	
		Taggatti	10,432	..	..	..	10,432	..	....	
		Javalagiri	6,016	..	..	..	6,016	..	....	
		Talli	6,368	..	..	..	6,368	..	....	
		Denkanikóta	2,816	..	..	..	2,816	..	....	
		Naganúr	..	..	3,200	..	3,200	..	No. 182 F.S.G.G., dated 3rd July 1888.	Transferred from 59-D.
	Dharmapuri	Pennagaram	10,304	..	..	..	10,304	..	....	
		Morappúr	..	..	16,640	..	16,640	..	No. 259, F.S.G.G., dated 9th October 1888.	Do.
	Hosúr and Dharmapuri.	Woddapatti	17,152	..	..	..	17,152	..	....	
	Dharmapuri and Hosúr.	Gutirayan	15,776	..	..	..	15,776	..	....	
	Krishnagiri	Bargúr (new)	1,920	..	..	..	1,920	..	....	Bargúr block, of 220 acres, is fire-protected.
		Togarapalli	901	..	..	..	901	..	....	Togarapalli block, of 499 acres, is fire-protected.
	Krishnagiri and Tirupatúr.	Kotúr	3,840	..	..	..	3,840	..	....	Pudúr block of 1,069 acres, is fire-protected.
	Trichengód	Pakkanad	..	..	4,500	..	4,500	..	No. 110, F.S.G.G., dated 17th April 1888.	Transferred from 59-D.
		Total	358,278	559·81	24,740	..	383,018	598·47		
Trichinopoly.	Trichinopoly	Tuvakudi	1,438	..	..	..	1,438	..	....	
	Kulitalai	Elamanúr	117·10	..	..	..	117·10	..	....	
		Pettuvoitalai	137	..	..	..	137	..	....	
		Kulitalai	77·18	..	..	..	77·18	..	....	
		Manattatai	44·86	..	..	..	44·86	..	....	
		Lálápet	268·20	..	..	..	268·20	..	....	
		Sitalavoi	160·32	..	..	..	160·32	..	....	
		Kattalai	74·35	..	..	..	74·35	..	....	
		Ténmalai	464	..	..	..	464	..	....	
		Minnakarudu	98	..	..	..	98	..	....	
		Panjantangi	1,543	..	..	..	1,543	..	....	

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Kulitalai—*cont.*	Viramalai hills	2,000	..	3,471·98	..	5,471·98	..	....	Ascertained by traverse.
		Royapatti hills	639	..	..	..	639	..	....	
		No. I Shemmalai	1,800	..	676 56	..	2,476·56	..	....	Do.
		Pakkirikaradu	65	..	..	..	65	..	....	
		Puttanatam range comprising Kuramalai, Palamalai and Nadumalai	798	..	..	92 75	705·25	..	....	Do.
		Surpam range	1,765	..	..	362·05	1,402·95	..	....	Do.
		Madalamalai	..	..	465·25	..	465·25	..	No. 151, F.S.G.G., dated 5th June 1888.	Transferred from 59-D.
	Musiri	Sengattupatti	3,000	..	..	..	3,000	..	....	
		Melúr	3,000	..	..	..	3,000	..	....	
		Kaliammankovil tittu	..	..	1,500	..	1,500	..	No. 271, F.S.G.G., dated 25th September 1888.	Do.
		Karuppankadu tittu	..	..	2,000	..	2,000	..	No. 239, F.S.G.G., dated 21st August 1888.	Do.
		Kanapadi, Kanniamman Solai.	..	..	2,560	..	2,560	..	No. 167, F.S.G.G., dated 19th June 1888.	Do.
		Kanapadi, Temparanad	..	..	12,000	..	12,000	..	No. 262, F.S.G.G., dated 25th September 1888.	Do.
		Palamalai	..	..	10,000	..	10,000	..	No. 240, F.S.G.G., dated 21st August 1888.	Do.
	Perambalúr	Manalodai	4,000	..	..	..	4,000	..	....	
		Salamatti	7,000	..	..	..	7,000	..	....	
		Selayur	..	..	1,600	..	1,600	..	No. 158, F.S.G.G, dated 5th June 1888.	Do.
		Puliyur	..	..	10,000	..	10,000	..	No. 166, F.S.G.G., dated 19th June 1888.	Do.
		Semmalai	..	..	5,000	..	5,000	..	No. 165, F.S.G.G., dated 19th June 1888.	Do.
		Sengattur	..	..	10,000	..	10,000	..	No. 247, F.S.G.G., dated 4th September 1888.	Do.
		Total ..	28,489·01	44·51	59,273·79	454·80	87,308	136·42		
Tanjore ..	Southern Range	Melottam Eastern block	10	..	..	..	10	..		
		Do. Western block	8	..	..	..	8	..		
		Manankadu	..	..	120	..	120	..	Declared under section 16 of the Madras Forest Act, *vide* G.O., dated 4th August 1888, No. 533.	Do.
		Talanayar	..	..	2,000	..	2,000	..		
		Tillavilagam	..	..	320	..	320	..		

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tanjore —*cont.*	Southern Range—*cont.*	Nadur No. II	..	..	200	..	200	..	Declared under section 16 of the Madras Forest Act, *vide* G.O., No. 661, dated 17th September 1888.	Transferred from 59-D.
		Tachankurchi	..	..	320	..	320	..		
		Viralipatti Northern block ..	..	..	145	..	145	..		
		Do. Southern do. ..	..	..	234	..	234	..		
		Kallupatti	..	..	85	..	85	..		
		Kollankarai	..	..	458	..	458	..		
		Puthur No. I	..	..	191	..	191	..		
		Do. ,, II	..	..	119	..	119	..	Declared under section 16 of the Madras Forest Act, *vide* G.O., No. 492, dated 18th July 1888.	
	Northern Range ..	Northern Casuarina	..	..	350	..	350	..		
		Southern do.	..	..	250	..	250	..		
		Neduvasal	..	..	42	..	42	..		
		Total ..	18	·03	4,834	..	4,852	7·58		
North Coimbatore.	Kollegál	Jadatalahulla	361·01	..	..	..	361·01	..	....	The Sandalwood reserves are demarcated, surveyed and mapped. These four tracts will be merged in larger areas of reserved forests in 1889-90.
		Udayárpálaiyam	296·63	..	..	..	296·63	..	....	
		Bailúr	1,186·39	..	..	..	1,186·39	..	....	
	Satyamangalam ..	Germalam	519·78	..	..	..	519·78	..	....	
		Vellamundi	12,800	..	..	..	12,800	..	....	
		Eastern slopes of Nílgiris. ..	48,000	..	* 12,800	..	60,800	..	....	* Rectification of area by Survey.
		Total ..	63,163·81	98·69	12,800	..	75,963·81	118·69		
South Coimbatore.	Tunakadavu	Anaimalais .. No. I	52,480	..	..	..	52,480	..	....	
	Ponachi	Do. .. ,, II	3,140	..	..	..	3,140	..	....	
	Udamalpet	Do. .. ,, III	47,360	..	..	..	47,360	..	....	
	Polláchi and Udamalpet	Anaimalais	133,120	..	..	..	133,120	..	....	
	Bolampatti	Bolampatti block No. I	47,680	..	..	..	47,680	..	....	
		Do. .. ,, II								
		Do. .. ,, III								
		Tadágam block ,, IV	30,720	..	..	..	30,720	..	....	
	Mettupálaiyam ..	Gopaneri block ,, V	38,200	..	..	..	38,200	..	....	
		Kempampalaiyam ,, VI								
		Nellitorai ,, VII								
		Odantorai ,, VIII	5,880	..	..	..	5,880	..	....	
		Modúr block ,, IX	3,600	..	..	..	3,600	..	....	
		Total ..	362,180	565·91	..	..	362,180	565·91		

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Madura	No. I Uttamapalaiyam.	Vannatiparai	27,481·6	..	..	..	27,481·6	..	..	
		Sirunganar	3,616	..	..	..	3,616	..	..	
		Mela Gudalur	1,280	..	..	..	1,280	..	..	
		Machakal	2,560	..	..	..	2,560	..	..	
		Kuttinachiyar	640	..	..	..	640	..	..	
		Pandaratorai	300	..	..	..	300	..	..	
		Tambirankanal	250	..	..	..	250	..	..	
		Surulipati	5,760	..	..	..	5,760	..	..	
		Jungle Conservancy.								
		Veerapandi	2	..	..	2	..	..	G.O., dated 15th Dec. 1888, No. 868.	
		Tamaraikulam	1	..	..	1	..	..		
		Allinagaram	2	..	..	2	..	..		
		Melmangalam	1·5	..	..	1·5	..	..		
		Mottanutu	2	..	..	2	..	..		
		Vadipatti	1	..	..	1	..	..		
		Pamber	4,755·2	..	..	..	4,755·2	..	..	
		Sengalvarai Ar	5,209·6	..	..	..	5,209·6	..	..	
		Pumbarai Vilpatti Valley	13,587·2	..	..	..	13,587·2	..	..	
		Kudiral Ar	10,060·8	..	..	..	10,060·8	..	..	
		Kukkal	9,644·8	..	..	..	9,644·8	..	..	
		Marudanadiyar	6,528	..	..	..	6,528	..	..	
		Pambúkal Ar	800	..	..	..	800	..	..	
		Siruvattukádu	2,279·2	..	..	..	2,279·2	..	..	
		Kaniyankádu	3,001·6	..	..	..	3,001·6	..	..	
		Vennilai	4,800	..	..	..	4,800	..	..	
		Ariyanuttkánal	64	..	..	..	64	..	..	
		Kumangovaithalai kádu	80	..	..	..	80	..	..	
	No. II, Kodaikánal.	Peterankánal	80	..	..	..	80	..	..	
		Varattarkanal	200	..	..	..	200	..	..	
		Iruttarkanal	100	..	..	..	100	..	..	
		Nochiárkádu	200	..	..	..	200	..	..	
		Talaiar Andarkoil kádu	30	..	..	..	30	..	..	
		Talaiar kádu	150	..	..	..	150	..	..	
		Kadamaravu	50	..	..	..	50	..	..	
		Vilamkombai	1,600	..	..	..	1,600	..	..	
		Parappár	42	..	..	42	..	..	G.O., dated 15th December 1888, No. 868.	
		Kadugutadikádu	1,280	..	..	..	1,280	..	..	
		Oliyanótodai	3,200	..	..	..	3,200	..	..	

Area of Reserved Forests, 1888-89—*cont.*

District	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
		Jungle Conservancy—cont.								
		Sholas on the Lower Palnis—								
		(*a*) Perumalmalai shola								
		(*b*) Togavarai shola.								
		(*c*) Sirutarkanal								
		(*d*) Arankanal								
		(*e*) Kadavu shola								
		Sholas on the Upper Palnis—								
		(*a*) Tiger shola								
		(*b*) Parappar shola	2,315				2,316		....	
		(*c*) Kodaikanal								
		(*d*) Pannitutamkanal								
		(*e*) Gunden and Manavan sholas.								
		(*f*) Gunden shola								
		(*g*) Sandanam shola								
	No. II, Kodaikanal—*cont.*	(*h*) Fort Hamilton								
		(*i*) Mariyan shola								
		Plantations.								
		Eucalyptus	16·62				16·62		....	
		Acacia	14			14			G.O., dated 15th Dec. 1888, No. 868.	
		Velamkombai	54·14				54·14		....	
		Gangavampatti	4			4			....	
		Kodaikanal Settlement	3			3			....	
Madura—*cont.*		Putnbarai	6				6		....	
		Virupatchi	7·15			7·15			G.O., dated 15th December 1888, No. 868.	
		Sivagiripatti	1·15			1·15			G.O., dated 15th December 1888, No. 868.	
		Amburivi			3,840		3,840		G.O., dated 11th December 1888, No. 250. Notified in F.S.G.G., dated 17th April 1889.	Transferred from 59. D.
		Perumalmalai			12,800		12,800		Notified in F.S.G.G., dated 18th September 1888.	
		Sirumalai	25,529·6				25,529·6		....	
	No. III, Dindigul	Mudimalai	6,086·4				6,086·4		....	
		Akkamahakaradu	1,600				1,600		....	
		Kappuravalikuttu	2,560				2,560		....	

Area of Reserved Forests, 1888-89—*cont.*

District	Range	Name of Forest	Area on 1st April 1888		Added during the year	Excluded or transferred to other heads	Area on 31st March 1889		Number and date of notification of addition or transfer	Remarks
			Acres	Equivalent in square miles	Acres	Acres	Acres	Equivalent in square miles		
		Plantation—cont								
		Tenkal	3,200				3,200		....	
		Sundamalai	2,240				2,240		....	
		Tannirkaradu	1,920				1,920		....	
		Kadavakurchi	5,120				5,120		....	
		Sengattampatti	4,480				4,480		....	
	No III, Dindigul—cont	Dindigul at the junction of Trichinopoly and Karur roads	1			1				
		Dindigul Munsif's Court	59			59			G O, dated 15th December 1888, No 868.	
Madura—cont		Do. race-course	4			4				
		Kovilur	1 19			1 19				
			15			15				
		Gudalur	1 18			1 18				
		Guvakapatti	130 52			† 130 52				
	No IV, Errampatti	Nagamalai	2,356			†2,356				
		Alagarmalai	13,036		* 4,474 24		17,510 24		....	* Rectification of area by survey
		Jungle Conservancy								† Transferred to 59 E
		Mudugamalai								
		Vellamalai	2,700			† 2,700				
		Perumalmalai								
	No V, Alagar Hill	Pillayarnattam Hills							Do	
		Tenapudupettai	126 78			† 126 8				
		Sakimangalam	467 94			† 467 94				
		Vikramangalam	10,240				10,240		....	
		Tenar	11 78			11 78				
		Tovarimán	21			21			* Do.	
		Navinipatti	12			12				
		Total	193,907 69	302 98	21,114 24	5,914 93	2,09,107 00	326 74		
	Nánguneri	Reserve No I	31,532 80				31,532 80		....	
	Ambásamudram	Do ,, II	91,008				91,008		....	
Tinnevelly	Tenkási	Do. ,, III	18,009 60				18,009 60		....	
	Sankaranainárkoil	Do ,, IV	19,737 60				19,737 60		....	
	Srivilliputur	Do. ,, V	23,270 40				23,270 40		....	
		Total	183,558 40	286 81	..	..	183,558 40	286 81		

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer	Remarks.
		Ernád Taluk.								
North Malabar.	Chedlet reserved forest.	Kuppadi block	7,337·44				7,337 44			
		Kurchiyat ,,	18,053·86				18,053 86			
		Rampúr ,,	18,854 67				18,854·67			
	Trans Beni	Nulpoya	3,613·28				3,613·28			
		Mavanhulla	12,576·64				12,576 64			
		Begur reserved forest	15,366				15,366			
		Total	75,801·89	118·44			75,801·89	118·44		
South Malabar.	Nilambúr	Karimpoya reserve	3,955·28				3,955 28			
		Amarampalaiyam ,,	468·04				468·04			
		Chatambarai ,,	699·52				699·52			
		Nellikutta ,,	1,824·13				1,824·13			
	Pálghat	Walayár ,,	3,017·00				3,017·00			
		Chenat Nair ,,	15,203·00				15,203·00			
		Total	25,166·97	39·32			25,166·97	39·32		
South Canara.	Kondapur	No. I, Sabladi	208				208			
	Udipi	,, II, Ajjarkad	160				160			
		,, III, Pillarkhan	320				320			
		,, VIII, Chinkramalle			2,560		2,560		G.O No. 64-F., dated 14th June 1888.	Transferred from 59 D.
		,, VI, Mannajikadu			422·73		422·73		G.O., No. 44-F., dated 22nd May 1888.	Do. do.
	Mangalore	,, VI, Chembugudi	75				75			
		,, VII, Kuttiyar	25				25			
		Nos. V and IV, Poitaji and Kayar Palla.	96				96			
		,, V, Ullal Casuarina and Horne Plantations.			57·11		57·11		G.O., No 66-F., 14th June 1888.	Do. do.
		,, X, Tannirbavi			69·99		69·99		G.O., No. 362, dated 22nd May 1888.	Do. do.
		,, XII, Hosabetta			376·01		376·01		G.O., No. 79, dated 20th July 1888.	Do. do.
	Uppinangadi	The Siradisiala reserve	19,200				19,200			
		The Bhagimalai	6,400				6,400			
		Total	26,484	41·38	3,485·84		29,969·84	46·82		
		Grand Total	1,537,362·77	2,402·13	261,491·48	6,578·70	1,792,275·55	2,800·44		

Abstract of Form No. 59-A.

District.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Remarks.
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Chingleput	56,189	87·80	2,980	10	59,159	92·44	
North Arcot ..	124,552·37	194·62	111,756·02	198·97	236,109·42	368·92	
South Arcot ..	39,573·63	61·83	20,507·59	..	60,081·22	93·88	
Salem	358,278	559·81	24,740	..	383,018	598·47	
Trichinopoly ..	28,489·01	44·51	59,273·79	454·80	87,308	136·42	
Tanjore	18	·03	4,834	..	4,852	7·58	
North Coimbatore ..	63,163·81	98·69	12,800	..	75,963·81	118·69	
South Coimbatore ..	362,180	565·91	..	..	362,180	565·91	
Madura	193,907·69	302·98	21,114·24	5,914·93	209,107	326·74	
Tinnevelly	183,558·40	286·81	..	..	183,558·40	286·81	
North Malabar ..	75,801·89	118·44	..	..	75,801·89	118·44	
South Malabar ..	25,166·97	39·32	..	..	25,166·97	39·32	
South Canara ..	26,484	41·38	3,485·84	..	29,969·84	46·82	
Total ..	1,537,362·77	2,402·13	261,491·48	6,578·70	1,792,275·55	2,800·44	

Annual Form No. 59-B.

Forest Department, Madras, Southern Circle.

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882.

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput ..	Tiruvallúr	Namalúr	938	..	..	..	938	..	....	
		Kolatar	248	..	..	..	248	..	....	
		Kuvakolli	156	..	..	..	156	..	....	
		Total ..	1,342	2·10	..	..	1,342	2·10		
North Arcot ..	....	....	..	..	..	..	..	..	....	
South Arcot	No. I, Tiruvannámalai.	Annamalai kasba hill and neighbourhood	2,080	..	..	..	2,080	..	....	
		Tandrampet	11,500	..	..	..	11,500	..	....	
		Kadambai	1,000	..	..	..	1,000	..	....	
		Tachampet, including Attipakam..	1,000	..	..	..	1,000	..	....	
	No. II, Tindivanam ..	Annamangalam	250	..	..	..	250	..	....	
		Vallanad Sevúr	1,115	..	..	..	1,115	..	....	
		Nangilikondan	50	..	..	..	50	..	....	
		Natamangalam	30	..	..	..	30	..	....	
		Vilukam	100	..	..	..	100	..	....	
		Olakúr	300	..	..	..	300	..	....	
		Roshanai	50	..	..	..	50	..	....	
		Edayalam	400	..	..	..	400	..	....	
		Eriyanúr	95	..	..	..	95	..	....	
		Jaggampet	108	..	..	..	108	..	....	
		Senalúr	150	..	..	..	150	..	....	
		Mannúr	50	..	..	..	50	..	....	
		Nemmalai	300	..	..	..	300	..	....	
		Endúr	50	..	..	..	50	..	....	
		Bramhadésam	50	..	..	..	50	..	....	
		Vannipper	50	..	..	..	50	..	....	
		Nadukuppam to Bramhadésam ..	400	..	..	..	400	..	....	
		Kandadu	370	..	..	..	370	..	....	
		Omapper	20	..	..	..	20	..	....	
		Mailam	265	..	..	..	265	..	....	

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot —*cont.*	No. III, Villupuram..	Tandavasamudram	1,000	..	..	..	1,000	..	....	
		Matúr	540	..	..		540	..	....	
		Turinjikádu	404	..	..	..	404	..	....	
		Odayanatam and Kadayam ..	1,000	..	..	..	1,000	..	....	
		Vanúr first bit	200	..	..	..	200	..	....	
		Vanúr second bit	150	..	..	..	150	..	....	
		Kalikoil	200	..	..	..	200	..	....	
		Chengadu	100	..	..	..	100	..	....	
		Mutampalaiyam	50	..	..	..	50	..	....	
		Navamal Maradúr	80	..	..	..	80	..	....	
		Aliyúr	70	..	..	..	70	..	....	
		Neliyanúr	70	..	..	..	70	..	....	
		Pakam	350	..	..	..	350	..	....	
		Sorapúr	50	..	..	..	50	..	....	
		Marudúr	70	..	..	..	70	..	....	
		Villupuram kasba tank	100	..	..	..	100	..	....	
		Kandampakam	60	..	..	..	60	..	....	
		Olaikai	50	..	..	..	50	..	....	
		Kappúr	50	..	..	..	50	..	....	
		Kondangi	100	..	..	..	100	..	....	
		Nannadu	100	..	..	..	100	..	....	
		Perumbákam	100	..	..	..	100	..	....	
		Dévanampet	100	..	..	..	100	..	....	
		Tiruvamatúr	28	..	..	..	28	..	....	
		Tennamadevi	51	..	..	..	51	..	....	
		Tangal	57	..	..	..	57	..	....	
		Siruvalai (Arumbili)	1,014	..	..	..	1,014	..	....	
		Vembi	256	..	..	..	256	..	....	
		Vikkravándi proper	150	..	..	..	150	..	....	
		Do. tangal	20	..	..	..	20	..	....	
		Saliyampalaiyam	70	..	..	..	70	..	....	
		Nemmalai	100	..	..	..	100	..	....	
		Dadavaram	200	..	..	..	200	..	....	
		Tiruvakkarai	1,000	..	..	..	1,000	..	....	
		Tuluvai	150	..	..	..	150	..	....	
	No. IV, Cuddalore ..	Selambánadampet	1	..	..	..	1	..	....	
		Badrakótai	344	..	..	..	344	..	....	
		Kanjiruppu	10	..	..	..	10	..	....	
		Veludayampattu	100	..	..	..	100	..	....	

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot —*cont.*	No. IV, Cuddalore—*cont.*	Kaliyankuppam	150	..	..	..	150	..	....	
		Kuttiyambakam	100	..	..	..	100	..	....	
		Siruvatúr	300	..	..	..	300	..	....	
	No. IV, Chidambaram.	Pichavaram	2,000	..	..	..	2,000	..	....	
		Ramapakam	800	..	..	..	800	..	....	
		Kondapuram	1,200	..	..	..	1,200	..	....	
		Pavanji Nallúr	200	..	..	..	200	..	....	
		Kollatankurchi	350	..	..	..	350	..	....	
		Nisangam	800	..	..	..	800	..	....	
		Adivaraganallúr	1,200	..	..	..	1,200	..	....	
		Kolakudi (east of road)	600	..	..	..	600	..	....	
		Pinnalúr (Wálajápet tank block) ..	400	..	..	..	400	..	....	
		Manamádévi	150	..	..	..	150	..	....	
		Viranam tank	1,500	..	..	..	1,500	..	....	
		Nattamúr	9,500	..	..	4,150	5,350	..	....	Transferred to 59 D.
		Chittamur	3,000	..	..	..	3,000	..	....	
		Arunávaram	2,650	..	..	..	2,650	..	....	
		Odiyatúr	2,500	..	..	..	2,500	..	....	
		Endúr	1,000	..	..	..	1,000	..	....	
		Virinjipuram and Kandachipuram.	1,500	..	..	..	1,500	..	....	
		Adukam (Tandarai)	1,500	..	..	1,500	..	..	....	
		Atipakam	2,000	..	..	2,000	..	..	....	Do. do.
		Sadakati	500	..	..	..	500	..	....	
		Swamimalai	4,000	..	..	4,000	..	..	....	Do. do.
		Maradúr	2,220	..	..	..	2,220	..	....	
		Ulandúrpet (Pandúr)	2,500	..	..	2,500	..	..	....	
	No. V, Tirukoilúr ..	Edakal proper (south of road) ..	900	..	..	900	..	..	....	
		Do. (north of road) ..	3,600	..	..	3,600	..	..	....	
		Alwarmalai	6,500	..	..	6,500	..	..	....	Do. do.
		Siruvakam	1,200	..	..	1,200	..	..	....	
		Kutadi	2,250	..	..	2,250	..	..	....	
		Sidévi	3,000	..	..	3,000	..	..	....	
		Kunjaram	1,500	..	..	..	1,500	..	....	
		Kallamédu	500	..	..	..	500	..	....	
		Elandorai (late Ponnavalam) ..	200	..	..	..	200	..	....	
		Tiruvennainullúr	40	..	..	..	40	..	....	
		Emappúr	70	..	..	..	70	..	....	
		Siruvanúr	50	..	..	..	50	..	....	
		Iruvelpet	50	..	..	..	50	..	....	
		Mélmangalam	40	..	..	..	40	..	....	

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot —*cont.*	No. V, Tirukoilúr—*cont.*	Mamandúr	50	..	..	..	50	..	....	
		Gramam	40	..	..	..	40	..	....	
		Elandorai tank	40	..	..	..	40	..	....	
		Panapakam	50	..	..	..	50	..	....	
		Sitilingamadam	70	..	..	..	70	..	....	
		Maradúr tank bed	60	..	..	..	60	..	....	
		Pudupalaiyam	40	..	..	..	40	..	....	
		Palayagram	65	..	..	..	65	..	....	
		Kanakádu	1,200	..	..	..	1,200	..	....	
		Kadambúr	100	..	..	..	100	..	....	
		Kaduvanúr	1,500	..	..	..	1,500	..	....	
		Katuvananjúr	800	..	..	..	800	..	....	
		Lálápet forest, including Chittal	1,500	..	..	..	1,500	..	....	
		Vengalam Pasar	3,000	..	..	..	3,000	..	....	
		Rishivendiyam	3,000	..	..	..	3,000	..	....	
		Nilamangalam	150	..	..	..	150	..	....	
		Emaputtur	1,000	..	..	..	1,000	..	....	
		Kolatúr	300	..	..	..	300	..	....	
	No. VI, Kallakurchi	Indali	1,000	..	..	..	1,000	..	....	
		Katalamalai	2,500	..	..	..	2,500	..	....	
		Nagalúr	900	..	..	..	900	..	....	
		Porasakurchi	750	..	..	..	750	..	....	
		Váransaram	450	..	..	..	450	..	....	
		Kuttakudi	1,000	..	..	..	1,000	..	....	
		Kilnariyappanúr	1,500	..	..	..	1,500	..	....	
		Varadiyappanúr	500	..	..	..	500	..	....	
		Chinna Salem	200	..	..	..	200	..	....	
		Tottapadi	250	..	..	..	250	..	....	
		Velankulam and Vennakuli	500	..	..	..	500	..	....	
		Semakotai and Palaiyapatnam	4,500	..	..	..	4,500	..	....	
		Pallipattu	1,500	..	..	..	1,500	..	....	
		Erulakurchi	300	..	..	..	300	..	....	
		Mélakuppankulam	600	..	..	..	600	..	....	
	No. VII, Vriddhácha-lam.	Parúr	3,000	..	..	..	3,000	..	....	
		Narimadam	600	..	..	..	600	..	....	
		Ammeri	500	..	..	..	500	..	....	
		Kuppanatam	750	..	..	..	750	..	....	
		Satamangalam	200	..	..	..	200	..	....	
		Arasuguli	100	..	..	..	100	..	....	
		Kolapakam	600	..	..	..	600	..	....	

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Arcot —*cont.*	No. VII, Vriddhachalam —*cont.*	Kammapuram	600	..	..	..	600	..	....	
		Kannangudi	2,000	..	..	..	2,000	..	....	
		Narasingamangalam	1,200	..	..	..	1,200	..	....	
		Kotanúr	2,700	..	..	..	2,700	..	....	
		Memsdúr	500	..	..	..	500	..	....	
		Pillúr	800	..	..	..	800	..	....	
		Pulambadi	2,000	..	..	..	2,000	..	....	
		Alambalam	2,000	..	..	..	2,000	..	....	
		Aderi	1,000	..	..	..	1,000	..	....	
		Katumailúr	800	..	..	..	800	..	....	
		Naraiyúr	3,000	..	..	..	3,000	..	....	
		Nangnr	1,800	..	..	..	1,800	..	....	
		Mangalam	300	..	..	..	300	..	....	
		Alliyúr	150	..	..	..	150	..	....	
		Pinjanúr	200	..	..	..	200	..	....	
		Kasba tank	200	..	..	..	200	..	....	
		Total ..	145,263	226·97	..	31,600	113,663	177·60		
Salem ..	....	....	..	..	..	..	..	..	....	434 acres transferred to 59-D, and the remainder correction of area.
Trichinopoly ..	Udayárpálaiyam ..	Sripurandan	486	·76	..	486	..	..	....	
Tanjore ..	Southern Range ..	Andrakadu	64	..	..	..	64	..	....	
		Settipalaiyam	421	..	..	..	421	..	....	
		Samudravéli	270	..	..	..	270	..	....	
		Náluvédapadi	374	..	..	..	374	..	....	
		Marungulam	152	..	..	..	152	..	....	
		Karungulam Mélpadi	389	..	..	..	389	..	....	
		Pudukudivadapatti	212	..	..	..	212	..	....	
		Kangiyampatti	67	..	..	..	67	..	....	
		Kannantangudi Kilayúr	232	..	..	..	232	..	....	
		Puvadúr	205	..	..	..	205	..	....	
		Tirumangalakotai Kilayúr ..	437	..	..	..	437	..	....	
		Do. Mélayúr ..	514	..	..	..	514	..	....	
		Ponnappúr	181	..	..	..	181	..	....	
		Apparasampétai	76	..	..	..	76	..	....	
		Pudugidapatnam	66	..	..	..	66	..	....	
		Tandalai	283	..	..	..	283	..	....	
		Ichankotai	77	..	..	..	77	..	....	
		Total ..	4,020	6·28	..	..	4,020	6·28		

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
North Coimbatore.	....	....	..	....	..	..	..	..	....	
South Coimbatore.	Udamalpet	Fuel reserve of Yeliyamutur ..	63	..	..	..	63	..	....	
		Do. of Tandoni	60	..	..	..	60	..	....	
		Do. of Dhalli	485	..	..	..	485	..	....	
		Kotamangalam	3	..	..	..	3	..	....	
		Chinnamalaipalaiyam	9	..	..	..	9	..	....	
		Gudimangalam	5	..	..	..	5	..	....	
		Pulamkinar	4	..	..	..	4	..	....	
		Púkkulam	14	..	..	..	14	..	....	
		Pulavadi	8	..	..	..	8	..	....	
		Madatukulam	3	..	..	..	3	..	....	
	Pollâchi	Kanatkadavu	8	..	..	..	8	..	....	
		Sankarayapuram	100	..	..	..	100	..	....	
		Mutiyampalaiyam	4	..	..	..	4	..	....	
		Periyakolandai	3	..	..	..	3	..	....	
		Kotampatti	6	..	..	..	6	..	....	
		Arasúr	58	..	..	..	58	..	....	
		Nachipalaiyam	63	..	..	..	63	..	....	
		Ammiapalaiyam	61	..	..	..	61	..	....	
		Kaduvettipalaiyam	82	..	..	..	82	..	....	
		Perumanallúr	81	..	..	..	81	..	....	
		Pudupalaiyam	66	..	..	..	66	..	....	
		Fuel reserve, Anupatti	3	..	..	..	3	..	....	
		Sittambalam	3	..	..	..	3	..	....	
	Palladam	Kottanúr	3	..	..	..	3	..	....	
		Manickapuram	5	..	..	..	5	..	....	
		Tiruppúr	5	..	..	..	5	..	....	
		Vadugapalaiyam	8	..	..	..	8	..	....	
		Ganapadipalaiyam	5	..	..	..	5	..	....	
		Appanaiyakanpatti	10	..	..	..	10	..	....	
		Nilambúr	10	..	..	..	10	..	....	
		Silakarakal	5	..	..	..	5	..	....	
		Agrarapudúr	5	..	..	..	5	..	....	
	Bolampatti	At the toll-gate at the road of Tadagam.	9	..	..	..	9	..	....	
		At the toll-gate east of Puliyankulam road.	55	..	..	..	55	..	....	
		Total ..	1,312	2·05	..	..	1,312	2·05		

Area of Forests, 1888-89, reserved under previous orders of Government or regarded as reserves prior to Act V of 1882—*cont.*

District.	Range.	Name of forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles	Acres.	Acres.	Acres.	Equivalent in square miles		
Madura ..	No. V, Madura	One hundred and four tank-beds in Tirumangalam taluk ..	4,000	6·25	..	..	4,000	6·25	....	
Tinnevelly ..	....	....	..	..	..	..	..	..	....	
North Malabar.	....	....	..	..	..	..	..	..	....	
South do.	....	....	..	..	..	..	..	..	....	
South Canara.	....	....	..	..	..	..	..	..	....	
		Grand Total ..	156,423	244·41	..	32,086	124,337	194 28	....	

ABSTRACT.

Chingleput ..		1,342	2·10	..	..	1,342	2·10	
North Arcot ..		..	..	..	..	..	..	
South Arcot ..		145,263	226·97	..	31,600	113,663	177 60	
Salem		..	..	..	..	..	..	
Trichinopoly ..		486	·76	..	486	..	..	
Tanjore ..		4,020	6·28	..	..	4,020	6 28	
North Coimbatore ..		..	..	..	..	..	..	
South Coimbatore ..		1,312	2·05	..	..	1,312	2·05	
Madura ..		4,000	6·25	..	..	4,000	6 25	
Tinnevelly ..		..	..	..	..	..	..	
North Malabar		..	..	..	..	..	..	
South Malabar		..	..	..	..	..	..	
South Canara.		..	..	..	..	..	..	
	Total ..	156,423	244·41	..	32,086	124,337	194·28	

Annual Form No. 59-D.

Forest Department, Madras, Southern Circle.

Area of Reserved Lands, 1888-89.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput	Tiruvallúr ..	Palavakam	2,511	..	..	..	2,511	..	....	
		Pulrambakam	577	..	..	..	..	..	G.O., No. 335, Revenue, dated 18th May 1888.	Transferred to 59-A.
		Mylapore	926	..	..	577	925	..	Do.	
		Vembedu	1,075	..	..	1,075	..	..	G.O., No. 204, dated 9th March 1888.	
	Chingleput ..	Vallam	1,328	..	..	1,328	..	..	....	
		Anjur	1,507	..	..	..	1,507	..	....	
		Nemali	633	..	..	..	633	..	....	
		Alapakam	485	..	* 1	..	486	..	....	* Error in calculation now rectified– *vide* Board's Proceedings, No. 26, Routine, dated 6th March 1889.
		Tirumani	639	..	..	..	639	..	....	
		Gúdalúr	2,744	..	..	..	2,744	..	....	
		Senkundram	1,236	..	..	..	1,236	..	....	
		Kolatur	1,441	..	..	..	1,441	..	....	
		Venkatapuram	119	..	..	..	119	..	....	
		Tirutteri	272	..	..	..	272	..	....	
		Paranur	378	..	..	..	378	..	....	
		Kattamkolatur	537	..	..	..	537	..	....	
		Acharapákam	864	..	..	..	864	..	....	
		Latur	1,011	..	..	..	1,011	..	....	
		Nedumaram	198	..	..	..	198	..	....	
		Venmani	238	..	..	..	238	..	....	
		Madaiyambakam	241	..	..	..	241	..	....	
		Sattamai	135	..	..	..	135	..	....	
		Kattugudalur	4,273	..	..	..	4,273	..	....	
		Rajapalaiyam	806	..	..	..	806	..	....	
		Kurumbarai	250	..	..	..	250	..	....	
		Endatur	168	..	..	..	168	..	....	
		Tandalam	1,428	..	..	..	1,428	..	....	
		Sirunallur	503	..	..	..	503	..	....	
		Kannimangalam	142	..	..	..	142	..	....	
		Nariyamputur	326	..	..	..	326	..	....	
		Karukuli	600	..	..	..	600	..	....	
		Kadalamangalam	731	..	..	..	731	..	....	
		Vadatavur	1,078	..	..	..	1,078	..	....	
		Vinayaganallur	127	..	..	..	127	..	....	
		Kunamkolatur	106	..	..	..	106	..	....	
		Rupanallur	538	..	..	..	538	..	....	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput—*cont.*	Chingleput—*cont.*	Kutrambakam .. A and B	691	..	* 17	..	‡ 708	..	G.O., No. 655, dated 13th September 1888.	* Added during selection. † Excluded at selection. ‡ Kutrambakam A. 121 Do. B. 211 Pudupur .. 376 708
		Puduppur								
		Mannur	585	..	..	† 15	570	..		
		Muttukadu	86	..	..	..	86	..		
		Kavanur	..	..	568	..	568	..	G.O., No. 347, dated 16th May 1888, Revenue.	Transferred from 59-E.
		Siruvanjur	..	..	465	..	465	..		
		Orattúr	..	..	312	..	312	..		
		Vattambakam	..	..	694	..	694	..		
		Vadakupattu	..	..	§ 699 + 29	..	728	..		§ Acquired at settlement.
		Nallúr	..	..	937	..	937	..	G.O., No. 655, dated 13th September 1888.	Transferred from 59-E.
		Moganiyam	..	..	942	..	942	..		
		Kalvoy	..	..	139	..	139	..		
		Kolattúr	..	..	1,899	..	1,899	..		
		Kayar	..	..	643	..	643	..		
		Taiyúr	..	..	1,084	..	1,084	..		
		Mambakam	..	..	766	..	766	..		
		Sonallore	..	..	1,119	..	1,119	..		
		Total ..	31,553	49·27	10,314	2,995	38,852	60·70		
North Arcot.	Pólúr	Kelur	3,537	..	..	..	3,537	..	No. 339, *Fort St. George Gazette*, dated 4th Oct. 1887.	Demarcated.
		Alliyamangalam	10,062	..	..	..	10,062	..		
		Kapalur	1,267	..	..	..	1,267	..		
		Malayalam reserve on the slopes of Javadi hill in the Pólúr taluk.	12,800	..	..	..	12,800	..		
		The slopes of Javadi hill in the Pólúr taluk including the jungle at their foot.	19,200	..	..	..	19,200	..	Board's Procs., No. 4214, dated 8th Dec. 1884.	
	Arcot	Sátúr	1,048	..	..	..	1,048	..	No. 225, *Fort St. George Gazette*, dated 14th June 1887.	Do.
		Sennaleri	1,675	..	..	..	1,675	..		
		Enadivadi	1,567	..	..	..	1,567	..		
		Tandalappantangal	1,112	..	..	..	1,112	..		
		Sholavaram	1,232	..	..	..	1,232	..		
	Wálajápet ..	Amur	6,020	..	..	..	6,020	..	No. 223, *Fort St. George Gazette*, dated 14th June 1887.	Demarcated, surveyed and fenced.
		Kolatur	1,779	..	..	..	1,779	..		
		Minnel	1,378	..	..	..	1,378	..		
		Gúdalúr	535	..	..	..	535	..		
		Banavaram	1,051	..	..	..	1,051	..		
		Ammanur	203	..	..	..	203	..		
		Anantapuram or Uriyur	540	..	..	..	540	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
North Arcot—*cont.*	Wálajápet—*cont.*	Vedantangal	64	..	..	..	64	..	Board's Proceedings, No. 2329 Forest 436, dated 13th August 1885.	
		Balakishnapuram	63	..	..	..	63	..		
		Katupakam	145	..	..	..	145	..		
		Aiyal	16	..	..	..	16	..		
		Banavaram	35	..	..	..	35	..		
		Head Assistant Collector's office compound.	4	..	..	..	4	..		
	Wandiwash ..	Venkundram	1,288	..	..	..	1,288	..	No. 275, *Fort St. George Gazette*, dated 26th July 1887.	Demarcated, surveyed and fenced.
		Ponnur	939	..	..	..	939	..		
		Badur	873	..	..	..	873	..		
		Nombidu	720	..	..	..	720	..		
		Kodiyalam	125	..	..	..	125	..		
		Nedungunam	1,797	..	..	..	1,797	..		
		Vishamangalam	1,148	..	..	..	1,148	..		Demarcated. * Transferred to 59-A.
		Brahmakatari	635	..	..	* 635	..	..		
		Nedungal	3,645	..	..	..	3,645	..		
	Javadi	Putur	12,800	..	..	12,800	..	..		
		Patrakad	19,200	..	..	19,200	..	..		Transferred to 59-A.
		Virappanur	64,000	..	..	64,000	..	..		
		Virasettipalle	7,587	..	..	..	7,587	..		
		Chittapara including (Bramasamudram).	4,850	..	..	..	4,850	..		
		Basavapalle	2,027	..	..	..	2,027	..		Demarcated.
		Mohimandalam	2,522	..	..	..	2,522	..		
	Chittur	Pachigunta	1,800	..	..	..	1,800	..	No. 183, *Fort St. George Gazette*, dated 10th May 1887.	
		Irala	16,130	..	..	..	16,130	..		
		Santapet	2,276	..	..	..	2,276	..		
		Chittur	360	..	..	..	360	..		Do. and surveyed.
		Kinattipalle	1,417	..	..	..	1,417	..		
		Chillapalle	1,296	..	..	..	1,296	..		
		Panamár	6,400	..	..	..	6,400	..		
	Chandragiri ..	Mamandúr extension	8,000	..	..	..	8,000	..	No. 326, *Fort St. George Gazette*, dated 20th Sept 1887.	Demarcated.
		Tirupati hill	16,000	..	..	..	16,000	..		
		Balapalle block	72,00	..	..	..	72,000	..	Board's Proceedings, No. 2329 Forest 436, dated 13th August 1885.	
		Nagapatla								
		Mungilpentla block								

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
North Arcot —*cont.*	Gudiyátam ..	Panamadangi	9,600	..	..	..	9,600	..	No. 242, *Fort St. George Gazette*, dated 5th July 1887.	Demarcated
		Paradurami extension	2,500	..	..	..	2,500	..		
		Sinnagunta	6,400	..	..	..	6,400	..		
		Naickeneri extension	1,280	..	..	..	1,280	..		
		Martana do.	9,600	..	..	..	9,600	..		
		Vikramasi	161	..	..	..	161	..	No. 14, *Fort St. George Gazette*, dated 10th Jan. 1888	Do. and fenced.
		Korapatla	2,620	..	..	..	2,620	..	Board's Proceedings., No. 2329 Forest 436, dated 13th August 1885.	
		Petlakuppam								
		Gundlapalle								
		Panamadangi								
		Ambúr	25,600	..	..	..	25,600	..	No. 341, *Fort St. George Gazette*, dated 4th Oct. 1887.	Demarcated
		Arasampet	18,000	..	..	..	18,000	..		
	Vellore	Tellai	15,121	..	..	15,121	..	..		Transferred to 59-A.
		Javadi hill block	20,400	..	..	..	20,400	..	Board's Proceedings., No. 939 Forest 183, dated 25th Mar. 1885.	
		Arasampet								
		Naickeneri								
	Palmanér ..	Charagal	..	..	19,200	..	19,200	..	No. 208, *Fort St George Gazette*, dated 24th July 1888, and G.O., No. 491, Revenue dated 18th July 1888.	Partly demarcated
		Peddunaig drug	..	..	12,800	..	12,800	..		
		Total ..	426,450	666·33	32,000	111,756	346,694	541 71		
South Arcot.	No. I, Tiruvannámalai.	Anandavadi	6,000	..	..	6,000	..	..	..	Transferred to 59-A.
		Valasamalai	7,000	..	..	..	7,000	..	..	
		Kavutumalai	6,000	..	..	6,000	..	..	..	Do. do.
		Tippakádu	6,002	..	..	6,002	..	..	..	Do. do.
		Tenmalai	20,000	..	..	..	20,000	..	..	
		Pelamaratúr or Gerugamandiyar ..	8,000	..	..	..	8,000	..	..	
		Nallapattu	7,000	..	..	..	7,000	..	..	
		Padipallam	3,748	..	..	..	3,748	..	..	
		Pakamalai	9,032	..	..	..	9,032	..	..	
		Agaram	601	..	..	601	..	..	..	
		Merkánam	81	..	..	81	..	..	..	
	No. II, Tindivanam.	Kurumbaram, 1st bit	..	..	..	..	300	..	..	Transferred to 59-A
		Kumalampet	1,222	..	..	1,222	..	..	..	Do. do.
		Panchalam	1,200	..	..	..	1,200	..	..	
		Bomnatur *alias* Venmaniyatur ..	302	..	..	302	..	..	..	Do. do.
		Peradikuppam	1,402	..	..	..	1,402	..	..	
		Akkúr	1,200	..	..	..	1,200	..	..	
		Naduvandúr	2,808	..	..	..	2,808	..	..	
		Jaggampet	300	..	..	300	..	..	..	Do. do.
	No. III, Villupuram—*cont.*	Nabob's tope	40	..	..	..	40	..	..	
		Panampattu	254	..	..	..	254	..	..	
		Valudareddi	125	..	..	..	125	..	..	
		Kappiyambuliyúr	507	..	..	..	507	..	..	
		Gangarampálaiyam	342	..	..	..	349	..	..	
		Vakkúr	193	..	..	..	193	..	..	
		Vikravándi	311	..	..	..	311	..	..	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot—*cont.*	No. III, Villupuram	Mélakondai	495	..	..	..	495	..	..	
		Satanúr	224	..	2	..	226	..	..	
		Narasinganúr	377	..	..	..	377	..	..	
		Gundalapuliyúr	871	..	11	..	882	..	..	
		Karanai	200	..	..	..	200	..	..	
		Satanúr, 2nd bit	228	..	..	..	228	..	..	
		Adanúr	1,447	..	..	..	1,447	..	..	
		Ariyalúr	350	..	..	..	350	..	..	
		Turinjikádu	700	..	..	..	700	..	..	
		Pulanjimalai	438	..	..	..	438	..	..	
		Tandavasamudram	2,000	..	..	..	2,000	..	..	
	No. IV, Cuddalore.	Ramapuram	1,330	..	..	..	1,330	..	..	
		Vellakarai	1,604	..	..	..	1,604	..	..	
		Valudalampattu	900	..	..	..	900	..	..	
		Sammattikuppam	350	..	..	..	350	..	..	
		Selambanádampet	650	..	..	..	650	..	..	
		Vadakuttu, 1st bit, or Maringur forest	400	..	..	..	400	..	..	
		Vadakuttu, 2nd bit, or Vegakottai forest	600	..	..	..	600	..	..	
		Vadakuttu proper, 3rd bit	2,399	..	..	..	2,399	..	..	
		Veludiyampet	1,699	..	..	..	1,699	..	..	
		Peramatur	1,700	..	..	..	1,700	..	..	
		Kangiruppu, 1st bit	2,000	..	..	..	2,000	..	..	
		Kangiruppu, 2nd bit	1 240	..	..	..	1,240	..	..	
		Velanguppam	1,000	..	..	..	1,000	..	..	
		Talangoda	201	..	..	..	201	..	..	
		Fort Saint David	45	..	..	..	45	..	..	
		Shanankuppam	195	..	..	..	195	..	..	
		Donitorai	89	..	..	..	89	..	..	
		Nochikádu	550	..	..	..	550	..	..	
		Periyakuppam	1,599	..	..	..	1,599	..	..	
	No. V, Tirukoilúr.	Nayanúr	..	..	31,600	..	31,600	..	G.O., No. 93, Rev., dated 16th February 1889.	
		Adukam								
		Attipakkam								
		Sawmimalai, 1st bit								
		Padiandal or Samimalai, 2nd bit								
		Nattamur, 1st bit								
		Malayanúr or Nattamur, 2nd bit								
		Sidevi								
		Alwarmalai								
		Sirupakkam or (Tirukoilúr)								
		Yedakal								
		Kutadi								
		Pandur								
		Velur								
		Perichanur								
		Total ..	109,851	171·64	31,620	20,508	120,963	189·00		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem ..	Atûr	Pattimedu	3,046	..	..	..	3,046	..		
		Nagalur	6,138	..	..	..	6,138	..		
		Tumbal	3,680	..	..	..	3,680	..		
	Salem	Pillapadi	4,992	..	..	..	4,992	..		
		Mallapuram ghât	2,285	..	..	..	2,285	..		
		Mallapuram ghât extension ..	640	..	..	..	640	..		
		Kurumbapatti	10,000	..	..	..	10,000	..		
		Vanavasi	9,000	..	..	..	9,000	..		
		Ramaswamymalai	3,000	..	..	..	3,000	..		
		Gundakal	4,000	..	..	..	4,000	..		
		Manukonda	5,500	..	..	..	5,500	..		
		Puliyankad	1,000	..	..	..	1,000	..		
		Arasankad	2,500	..	..	..	2,500	..		
		Kaputu	3,500	..	..	..	3,500	..		
		Madikotai	3,500	..	..	..	3,500	..		
		Pungamadevi	2,500	..	..	..	2,500	..		
		Godumalai	7,000	..	..	..	7,000	..		
		Jallutu	12,000	..	..	..	12,000	..		
		Pudupatti	7,500	..	..	..	7,500	..		
		Kanjamalai	4,500	..	..	..	4,500	..		
		Sanyasimalai	..	..	600	..	600	..	Nos. 266 & 273, *Fort St. George Gazette*, dated 25th Sept. 1888.	
		Nagaramalai	1,280	..	..	..	1,280	..		
		Yercaud	22	..	..	..	22	..		
		Mary land	400	..	..	..	400	..		
		Kudimadavu	4,307	..	..	..	4,307	..		
		Yelatur	2,000	..	..	..	2,000	..		
		Vellampatti	3,500	..	..	..	3,500	..		
		Kurichi	2,300	..	..	..	2,300	..		
		Mallur	5,000	..	..	..	5,000	..		
	Uttankarai ..	Ammapalaiyam	9,216	..	..	..	9,216	..		
		Nochikóttai	7,917	..	..	..	7,917	..		
		Kalnad	4,320	..	..	..	4,320	..		
		Karungal	4,320	..	..	..	4,320	..		
		Uttankarai (new)	3,200	..	..	..	3,200	..	..	Uttankarai block of 469 acres is specially protected.
		Wonnagiri	2,944	..	..	..	2,944	..		
		Kallávi	4,160	..	..	..	4,160	..		
		Payapatti	3,488	..	..	..	3,488	..		
		Marappúr	4,000	..	..	..	4,000	..		
		Harúr (new)	1,001	..	..	..	1,001	..	..	Harur block of 1,176 acres is specially protected.
		Tirtamalai	11,046	..	..	..	11,046	..		
		Vepampatti	8,640	..	..	..	8,640	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Salem—*cont.*	Uttankarai—*cont.*	Kalladipatti	2,912	..	..	..	2,912	..		
		Tenkaraikotta	2,368	..	..	..	2,368	..		
		Kowramalai	8,512	..	..	..	8,512	..		
		Mallapuram extension	..	..	400	* 400	..	..	No. 162, *Fort St. George Gazette*, dated 19th June 1888.	* Transferred to 59-A—*vide* No. 23, *Fort St. George Gazette*, dated 29th January 1889.
		Kowramalai do.	..	..	4,000	..	4,000	..		
		Mukanúr	..	..	8,000	..	8,000	..		
	Tirupatúr and Utankarai.	Govindapuram	3,104	..	..	..	3,104	..		
	Hosúr	Naganúr	3,200	..	..	3,200	..	..	No. 182, *Fort St. George Gazette*, dated 3rd July 1888	Transferred to 59-A.
		Hulibunda	7,360	..	..	..	7,360	..		
		Pani	5,856	..	..	..	5,856	..		
		Kundukota	4,768	..	..	..	4,768	..		
		Sivanahalli	4,992	..	..	..	4,992	..		
	Dharampuri ..	Bianurmalai	..	..	11,500	..	11,500	..	Nos. 226 and 273, *Fort St. George Gazette*, dated 25th Sept. 1888.	
		Bathanavadi	..	..	27,000	..	27,000	..		
		Perumbalai	..	..	12,000	..	12,000	..		
		Kalapambadi	..	..	9,500	..	9,500	..		
		Toppúr	..	..	7,000	..	7,000	..		
		Kesaragali	..	..	6,400	..	6,400	..	No. 125, *Fort St. George Gazette*, dated 8th May 1888.	
		Picklimalai	..	..	6,400	..	6,400	..		
		Masakal	..	..	9,600	..	9,600	..		
	Dharmapuri and Hosúr.	Morappúr	17,840	..	..	17,840	..	..	No. 289, *Fort St. George Gazette*, dated 9th Oct. 1888.	16,640 acres transferred to 59-A and 1,200 acres cut out at settlement.
	Krishnagiri ..	Maharajagadai	10,304	..	..	..	10,304	..		
		Neralkotta	7,040	..	..	..	7,040	..		
	Tirupatúr ..	Vellakuttai	1,152	..	..	..	1,152	..		
		Kotanur	7,257	..	..	..	7,257	..		
		Garagamandi	1,280	..	..	..	1,280	..		
		Madagatar	3,200	..	..	..	3,200	..		
		Andiyappanur	4,704	..	..	..	4,704	..		
	Tiruchengód ..	Pakkanad	4,500	..	..	4,500	..	..	No. 110, *Fort St. George Gazette*, dated 17th April 1888.	Transferred to 59-A.
		Suriyamalai	5,000	..	..	..	5,000	..		
	Tirupatúr and Krishnagiri.	Nandibanda	2,500	..	..	..	2,500	..		
		Total ..	288,091	450·14	102,400	25,940	364,551	569·61		
Trichinopoly.	Trichinopoly ..	Ettarai	483	..	..	..	483	..		
		Adavatúr, No. I	370	..	..	..	370	..		
		Do. „ II	331	..	..	..	331	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Trichinopoly—*cont.*	Trichinopoly—*cont.*	Valúr	382	..	..	..	382	..		
		Kotapatti	211	..	..	..	211	..		
		Natarajapuram	109	..	..	..	109	..		
		Alandúr	149	..	..	..	149	..		
		Adavatúr	144	..	..	..	144	..		
		Punganúr	281	..	..	..	281	..		
		Shemmalai, No. II	1,424	..	* 169	..	1,593	..	....	* As certained by Traverse.
		Maradur	180	..	..	..	180	..		
		Maiyanúr	50	..	..	..	50	..		
		Pudúr	143	..	..	..	143	..		
		Sekkanam	119	..	..	..	119	..		
	Kulitalai	Mahadanapuram	191	..	..	..	191	..		
		Pillapalaivam	11	..	..	..	11	..		
		Vengampatti	102	..	1	..	103	..		
		Punjantangi hill valley	262	..	..	..	262	..		
		Tani and Nengamakaradu	700	..	* 14	..	714	..		
		Mudalaimalai	300	..	* 165	= (a) 465	..	..		
		Karúppúr Reddipatti hill	4,254	..	..	* 142	4,112	..		
		Omandúr	320	..	1	..	321	..	....	(a) Transferred to 59-A.
		Tolayanatam and Kotrapatti	333	..	..	..	333	..		
		Tirutalaiyúr	125	..	..	..	125	..		
		Yedumalai	959	..	..	..	959	..		
		Vellakalpatti	1,224	..	..	..	1,224	..		
		Pulivalam	522	..	..	..	522	..		
		Mavalipatti	1,010	..	..	..	1,010	..		
		Visalatchyammal Samudram	138	..	..	..	138	..		
	Musiri	Kaliammankovil tittu	1,500	..	..	1,500	..	..	....	Do. do.
		Karuppakadu tittu	2,000	..	..	2,000	..			
		Kanapadi Kannimar solai	2,560	..	..	2,560	..			
		Silaiyúr	1,600	..	..	1,600	..			
		Valaiyúr	3,480	..	..	..	3,480	..		
		Manmalai	3,000	..	..	..	3,000	..		
		Kanjúrmalai and Uduvampattimalai.								
		Kanapadi (Temparanad)	12,000	..	..	12,000	..	..	....	Do. do.
		Kanapadi (Vunnad)	10,000	..	..	..	10,000	..		
		Palamalai	15,000	..	..	(a) 15,000	..	..	....	(a) Transferred to 59-A 10,000 acres; excluded at settlement 5,000.
	Perambalúr	Kannam	194	..	1	..	195	..		
		Kotavasal	167	..	..	..	167	..		
		Koraipadai	221	..	..	..	221	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Perambalúr—*cont.*	Sengatúr	10,000	..	..	10,000	..	..	....	Transferred to 59-A.
		Valaiyúr	3,000	..	..	..	3,000	..		
		Semmalaí	5,000	..	..	5,000	..	..	....	
		Puliyur	10,000	..	..	10,000	..	..		Do. do.
		Udumbiyam	500	..	..	..	500	..		
		Periyavenmani	138	..	..	..	138	..		
		Tondapadi	276	..	..	..	276	..		
		Anukur	487	..	..	..	487	..		
		Malvoy	264	..	..	..	264	..		
		Mossiyam	152	..	..	..	152	..		
		Padu Vellakudi	113	..	..	..	113	..		
		Kallakudi	123	..	..	..	123	..		
		Attiyur	98	..	..	..	98	..		
		Veppantottai	213	..	..	..	213	..		
		Pasumbalur Terkukarai	148	..	1	..	149	..		
		Pasumbalur Vadakarai	240	..	..	..	240	..		
		Nunne	175	..	..	..	175	..		
		Kolatur	116	..	..	..	116	..		
		Orgalur	190	..	..	..	190	..		
		Sirukudal	166	..	..	..	166	..		
		Saturpakam	352	..	..	..	352	..		
		Kelapuliyur	228	..	1	..	229	..		
		Neikuppai, No. I	154	..	..	..	154	..		
		Do. „ II	90	..	..	..	90	..		
		Yesanai	113	..	..	..	113	..		
		Peramattur	658	..	..	..	658	..		
		Mavalingai	260	..	..	..	260	..		
		Pulámbadi, No. I	222	..	..	..	222	..		
		Do. „ II	645	..	..	..	645	..		
		Do. „ III	133	..	..	..	133	..		
		Viswakudi	150	..	..	..	150	..		
		Mattavarai	283	..	..	..	283	..		
		Araiyúr, No. I	290	..	..	..	290	..		
		Do. „ II	140	..	..	..	140	..		
		Ladapuram	103	..	..	..	103	..		
		Sittali	404	..	..	..	404	..		
		Suniya Vadakarai	268	..	..	..	268	..		
		Nattapur	175	..	..	..	175	..		
		Makurumbalur	269	..	..	..	269	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Perambalúr—*cont.*	Sathanavadi	214	..	..	..	214	..	....	....
		Vengalam	360	..	1	..	361	..	....	....
		Kalpadai	300	..	..	..	300	..	....	....
		Venparur	1,024	..	..	..	1,024	..	....	....
		Paravai	150	..	..	..	150	..	....	....
		Nergunam	1,253	..	..	..	1,253	..	....	....
		Tevaiyur	253	..	..	..	253	..	....	....
		Metupálaiyam	539	..	..	..	539	..	....	....
		Elambalur	214	..	..	..	214	..	....	....
		Maravattur	261	..	..	..	261	..	....	....
		Kanakasittur	310	..	..	..	310	..	....	....
		Periyur	856	..	..	..	856	..	....	....
		Vannarpundi	214	..	..	..	214	..	....	....
		Tiruvalandurai	197	..	..	..	197	..	....	....
		Bramhadesam	273	..	..	..	273	..	....	....
		Kufumbalur	366	..	..	..	366	..	....	....
		Nambakurchi, No. I	328	..	..	..	328	..	....	....
		Do. II	165	..	..	..	165	..	....	....
		Kilarasur ,,	207	..	..	..	207	..	....	....
		Kilakarai	119	..	..	..	119	..	....	....
		Yeraiyur and Naduvasal	562	..	..	..	562	..	....	....
		Naduvasal	176	..	..	..	176	..	....	....
		Sirumatur	499	..	..	..	499	..	....	....
	Udaiyárpálaiyam	Jayankondacholapuram, No I	80	..	70	..	150	..		....
		Do. ,, II	250	..	50	..	300	..		....
		Vanavallur	250	..	..	50	200	..		....
		Malangankudisempu	100	..	50	..	150	..		....
		Kodukur	150	..	..	50	100	..		....
		Kanjuli	800	..	..	..	800	..		....
		Aíyur	1,320	..	80	..	1,400	..		....
		Tirukanam	700	..	..	50	650	..	Notified under section 4—*vide* G-O, dated 27th April 1888, Forest No. 32.	....
		Pasikulam	100	..	..	..	100	..		....
		Adanakurchi	250	..	..	..	250	..		....
		Sittadaisr	50	..	4	..	54	..		....
		Kulamur	200	..	..	..	200	..		....
		Periyakurchi	150	..	..	..	150	..		....
		Sattambadi	800	..	200	..	1,000	..		....
		Alvoy	300	..	..	..	300	..		....
		Ambapur	200	..	..	..	200	..		....
		Ulliyagudi	200	..	..	..	200	..		....

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Trichinopoly—*cont.*	Udaiyárpálaiyam—*cont.*	Sundreswarapuram	150	..	..	..	150	..		
		Periyapalaiyam	951	..	49	..	1,000	..		
		Vettiyarvettu	460	..	190	..	650	..		
		Kovilur	640	..	60	..	700	..		
		Mudukulam	1,170	..	30	..	1,200	..		
		Velangudi	890	..	10	..	900	..		
		Kolamanikkem	..	..	242	..	242	..	Notified under section 4—*vide* G.O., dated 27th April 1888, Forest No. 32.	
		Aramanakurchi	..	..	91	..	91	..		
		Karaipakkam	..	..	83	..	83	..		
		Tiruvenganur, I to V	..	..	136	..	136	..		
		Varappankurchi, I to VI	..	..	190	..	190	..		
		Sattambadi, I to XI	..	..	179	..	179	..		
		Sripurandan, I and II	..	..	434	..	434	..		
		Velakkurchi, I to III	..	..	48	..	48	..		
		Annagarampetai, I to V.	..	..	58	..	58	..		
		Tennamanallur	..	..	10	..	10	..		
		Total ..	121,886	190·45	2,618	60,417	64,087	100·14	....	
Tanjore ..	Northern ,,	Vellangudi	1,900	..	..	..	1,900	..	....	
		Northern Casuarina	350	..	..	350	..	..	....	
		Southern do.	250	..	..	250	..	..	....	Transferred to 59-A.
		Neduvasal	42	..	..	42	..	..	....	
		Elantope	..	..	18	..	18	..	Notified under section 4—*vide* G.O., dated 9th May 1888, No. 319.	
		Talandondi	..	..	100	..	100	..		
		Karpalam	..	..	54	..	54	..		
		Kadagavinayaganallur	..	..	90	..	90	..		
		Ambanar, No. I	..	..	134	..	194	..	Notified under rule 2, section 26 of the Act,—*vide* Board's Proceedings, dated 10th January 1889, No. 17.	
		Do. ,, II	..	..	122	..	122	..		
		Kaliyappanallur	..	..	20	..	20	..		
		Kodiyakadu point calmere ..	4,355	..	..	..	4,355	..		
		Nadur, No. I	1,000	..	..	..	1,060	..		
		Do. ,, II	200	..	..	200	..	..	....	
		Tachenkurchi	320	..	..	320	..	..	....	
		Kollangorai	458	..	..	458	..	..	....	
		Viralipatti North block	145	..	..	145	..	..	....	
	Southern ,,	Do. South block	234	..	..	234	..	..	....	Transferred to 59 A.
		Kalluputtu	85	..	..	85	..	..	....	
		Pudur, No. I	191	..	..	191	..	..	....	
		Do. ,, II	119	..	..	119	..	..	....	
		Manakadu	120	..	..	120	..	..	....	
		Talanayar	2,000	..	..	2,000	..	..	....	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tanjore—*cont.*	Southern—*cont.*	Tillaivilagam	320	..	..	320	..	..		Transferred to 59 A.
		Edangankotai	200	..	..	..	200	..		
		Perumagalur	..	..	13	..	13	..		
		Kolakudi	..	..	13	..	13	..		
		Mudakurchi	..	..	10	..	10	..		
		Anaikadu	..	..	10	..	10	..		
		Vattagudi	..	..	10	..	10	..		
		Alatúr	..	..	10	..	10	..		
		Kannugudi, No. I	..	..	10	..	10	..		
		Do. No. II	..	..	266	..	266	..		
		Pambutukadu	..	..	208	..	203	..		
		Kodavani	..	..	53	..	53	..		
		Vakkanattu reserve								
		Nannilám	..	..	2	..	2	..	Notified as reserved lands under rule 2, section 26 of the Forest Act—*vide* Board's Proceedings, dated 10th January 1889, No. 17.	
		Melakadu	..	..	331	..	331	..		
		Vendayanpatti	..	..	231	..	231	..		
		Kambayanattam	..	..	65	..	65	..		
		Karungulam, No. I	..	..	100	..	100	..		
		Do. No. II	..	..	141	..	141	..		
		Tolarapatti	..	..	538	..	538	..		
		Pinganmodu	..	..	116	..	116	..		
		Vaduvur, No. I	..	..	57	..	57	..		
		Do ,, II	..	..	94	..	94	..		
		Do. ,, III	..	..	38	..	38	..		
		Do. ,, IV	..	..	133	..	133	..		
		Do. ,, V	..	..	124	..	124	..		
		Do. ,, VI	..	..	146	..	146	..		
		Do. ,, VII	..	..	212	..	212	..		
		Sorapettai	..	..	70	..	70	..		
		Ullikottai	..	..	130	..	130	..		
		Total ..	12,289	19·20	3,664	4,834	11,119	17·37		
North Coimbatore.	Erode	....	27,927	..	..	..	27,927	..	....	
	Karúr	....	3,627	..	..	78	3,549	..	Board's Proceedings, Forest No. 351, dated 4th July 1888.	
	Satyamangalam ..	Talamalai	1,21,600	..	..	..	1,21,600	..	Notified under section 4—*vide* G.O., No. 1003, dated 24th October 1887.	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres	Acres.	Acres.	Equivalent in square miles.		
North Coimbatore—*cont.*	Satyamangalam—*cont.*	Gutyalatur	179,200	..	..	..	179,200	..	Notified under section 4—*vide* G.O., No. 1075, dated 15th Nov. 1887.	Of these blocks the first two (187 square miles) were notified under section 4 during the year—*vide* G.Os., No. 31 of 22nd January 1889 and No. 183 of 12th March 1889.
	Kollegál ..	Chikkiyatur	597,760	..	..	..	597,760	..		
		Dodasampagai								
		Yedaralli								
		Ponachi								
	Bhavání ..	Palamalai	28,160	..	..	..	28,160	..		
		Bargur	215,040	..	..	..	215,040	..		
		Total ..	1,173,314	1,833·30	..	78	1,173,236	1833·18		
South Coimbatore.	Sholakarai. Coimbatore taluk.	Small Sholakarai reserve	81	..	..	..	81	..	Notified under section 4—*vide* G.O., F. No. 208, dated 7th April 1888.	
	Palladam taluk ..	Alatúr	237	..	..	..	237	..		
		Ammapalaiyam	119	..	..	..	119	..		
		Arasúr	94	..	..	..	94	..		
		Asanellipalaiyam	160	..	..	..	160	..		
		Avanáshi	55	..	..	..	55	..		
		Ichipatti	639	..	..	..	639	..		
		Iduvai	125	..	..	..	125	..		
		Itiverampalaiyam	581	..	..	..	581	..		
		Kadirampalaiyam	188	..	..	..	188	..		
		Káduvettipalaiyam	80	..	..	..	80	..		
		Kalipalaiyam	123	..	..	..	123	..		
		Kandampalaiyam	92	..	..	..	92	..		
		Kaniyampalaiyam	156	..	..	..	156	..		
		Kaniyúr	820	..	..	..	820	..		
		Karadibavi	50	..	..	..	50	..		
		Karaipudúr	92	..	..	..	92	..		
		Karavalur	522	..	..	..	522	..		
		Kurumbapalaiyam	299	..	..	..	299	..		
		Korumatampatti	306	..	..	..	306	..		
		Kodangipalaiyam	121	..	..	..	121	..		
		Kuppandapalaiyam	69	..	..	..	69	..		
		Kuttagam	582	..	..	..	582	..		
		Mangarasuvalaiyapalaiyam ..	271	..	..	..	271	..		
		Moparipalaiyam	163	..	..	..	163	..		
		Naranapuram	556	..	..	..	556	..		
		Narayampalli	51	..	..	..	51	..		
		Nilambúr	113	..	..	..	113	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Coimbatore—*cont.*	Palladam taluk—*cont.*	Papakulam	103	..	..	..	103	..		
		Paruvai	76	..	..	..	76	..		
		Pattampalaiyam	126	..	..	..	126	..		
		Perumanallur	159	..	..	..	159	..		
		Perunkarunaipalaiyam	53	..	..	..	53	..		
		Pudupalaiyam	793	..	..	..	793	..		
		Pulippar	72	..	..	..	72	..		
		Puluvapatti	111	..	..	..	111	..		
		Pumalur	291	..	..	..	291	..		
		Rakkiyapalaiyam	278	..	..	..	278	..		
		Samalapuram	52	..	..	..	52	..		
		Settipalaiyam	159	..	..	..	159	..		
		Semmeripalaiyam	75	..	..	..	75	..		
		Sokkanur	132	..	..	..	132	..		
		Sukkampalaiyam	479	..	..	..	479	..		
		Tandagarampalaiyam	83	..	..	..	83	..		
		Tattanur	290	..	..	..	290	..		
		Tekkalur	389	..	..	..	389	..		
		Taranallur	82	..	..	..	82	..		
		Tulukamutur	60	..	..	..	60	..		
		Uppilipalaiyam	99	..	..	..	99	..		
		Vadugapalaiyam	57	..	..	..	57	..		
		Do.	293	..	..	..	293	..		
		Vallipuram	52	..	..	..	52	..		
		Velampalaiyam	81	..	..	..	81	..		
		Do.	75	..	..	..	75	..		
		Virapandi	175	..	..	..	175	..		
		Total	11,440	17·88	..	..	11,440	17·88		
Madura	No. I or Uttamapalaiyam.	Kombai	6,400	..	..	..	6,400	..		
		No. I, Vellaikaradu	965	..	..	..	965	..		
		,, II, Sonaikaradu	182	..	..	..	182	..		
		,, III, Mottaikaradu	193	..	..	..	193	..		
		,, IV, Kuttaikaradu	125	..	..	..	125	..		
		,, V, Nagamalaikaradu	118	..	..	..	118	..		
		,, VI, Perumalkovilkaradu	573	..	..	..	573	..		
		,, VII, Sanniyasikovilkaradu	283	..	..	..	283	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Madura—*cont.*	No. II or Kodaikánal	Amburuvi	3,840	..	..	3,840	..	..	G.O., No. 250, of 15th Dec. 1888, *Fort St. George Gazette*, dated 17th April 1888.	Transferred to 59-A.
		Karugal Dhoni Médu	2,560	..	..	..	2,560	..		
		Adukam	3,200	..	..	..	3,200	..		
		Murugamalai F F.R.	3,226	..	..	..	3,226	..		
		The southern slopes of the Palni hills.	25,600	..	..	..	25,600	..		
		The northern slopes of the Palni hills.	16,000	..	..	..	16,000	..		
		All the lands on the Lower Palni hills lying outside the limits of certain cultivable waste, selected and set apart.	32,000	..	..	..	32,000	..	*Fort St. George Gazette*, dated 15th September 1888.	Transferred to 59-A.
		Perumalmalai	12,800	..	..	12,800	..	..		
		Arunkanal	2,560	..	..	..	2,560	..		
		Kallar	9,600	..	..	..	9,600	..		
		Unjamalai	157	..	..	..	157	..		
		Kokkuparai	130	..	..	..	130	..		
		Manjakaraiar..	1,600	..	..	..	..	..		
		Vanjankanal		..	..	..	..	..		
		Alayadikanal		..	..	..	..	..		
		Checkodikanal		..	..	..	..	..		
		Kadugatadikadu		..	..	..	..	..		
		Koviladikanal		..	..	..	..	..		
		Kumalarakadu		..	..	..	1,600	..		
		Talakodikadu		..	..	..	..	..		
		Kivikuttikadu		..	..	..	..	..		
		Ponvettukanal		..	..	..	..	..		
		Periyasalaikadu		..	..	..	..	..		
		Polyapattimalai		..	..	..	..	..		
		Elamalai		..	..	..	..	..		
		Nadumbaráikadu		..	..	..	..	..		
	No. III or Dindigul.	Karandamalais	22,400	..	..	..	22,400	..		
		Panjantangi hills	3,200	..	..	..	3,200	..		
		Waggatumalai F. F. R.	4,200	..	..	..	4,200	..	Notified under Section 4, G O., dated 8th September 1888, Forest No. 102.	
		Kachakatti do.	1,694	..	..	..	1,694	..		
		Chembulimalai	1,600	..	..	..	1,600	..		
	No. IV or Méttupatti.	Mottamalai	1,280	..	..	..	1,280	..		
		Perumalai	2,560	..	..	..	2,560	..		
		Pulamalai	1,920	..	..	..	1,920	..		
		Pudagudimalai	1,600	..	..	..	1,600	..		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Madura—*cont.*	No. V or Alagar Hill.	Tiruparamkunḍram	960	..	..	..	960	..	....	
		Elephant Rock	640	..	..	..	640	..	....	
		Ammamali	1,600	..	..	..	1,600	..	....	
		Mudupattimalai								
		Vandiyurkaradu								
		Nalluvampatti Karadu	1,920	..	..	..	1,920	..	....	
		Total ..	167,686	262·00	..	16,640	151,046	236·01	....	
Tinnevelly.	Nángunéri ..	Block I (*a*)	25,999	..	..	..	25,999	..	....	
		Teak Forest	285	..	..	1	284	..	....	* To rectify a clerical error.
		Chinnakadu defined in Mr. Baber's decision on the claims of inamdar	2,560	..	..	..	2,560	..	....	
	Ambásamudram ..	Block II (*a*) and (*b*)	53,819	..	..	..	53,819	..	....	
		Mullimalai	457	..	..	..	457	..	....	
		Kaliyaniamman kovil parai ..	309	..	..	..	309	..	....	
		Koviladi parai	125	..	..	..	125	..	....	
		Salupparpadai	71	..	..	..	71	..	....	
		Kolandamámalai	1,540	..	..	..	1,540	..	....	
	Tenkási ..	Block III (*a*), (*b*) and (*c*)	10,643	..	..	..	10,643	..	....	
		Okaninran pádai	85	..	..	..	85	..	....	
		Kavalkuti peramba	375	..	..	..	375	..	....	
		Kottamalai	860	..	..	..	860	..	....	
		Nalankurchi	212	..	..	..	212	..	....	
	Sankaranainárkoil.	Block IV (*a*)	30,713	..	..	..	30,713	..	....	
		Chunnambu peramba	286	..	..	..	286	..	....	
		Seiyamalai and Vedamalai ..	294	..	..	..	294	..	....	
	Srívilliputur ..	Block V (*a*)	40,006	..	..	..	40,006	..	....	
		Kotankulam	630	..	..	157	473	..	....	* Portion given over to Mayuranadaswamy temple during settlement.
		Sappaniperamba	376	..	..	..	376	..	....	
		Pulpattiperamba	51	..	..	..	51	..	....	
		Valaikulamperamba	1,120	..	..	..	1,120	..	....	
		Onipattimalai	530	..	..	..	530	..	....	
		Martandamparai	135	..	..	..	135	..	....	
	Tinnevelly ..	Talaiyútu	891	..	..	..	891	..	....	
		Sivilaperiperamba	263	..	..	..	263	..	....	
	Tenkarai	Kottamadaki	1,279	..	..	..	1,279	..	....	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tinnevelly—*cont.*	Tenkarai—*cont.*	Kudiraimalai	13,419	..	..	* 26	13,393	..	....	* Excluded during Settlement.
		Punnamparai	117	..	..	..	117	..	....	Do.
		Kongrayakurchi	78	..	..	* 18	60	..	....	
		Kalyarkádu	158	..	..	..	158	..	....	
		Vellanad hills	4,667	..	..	..	4,667	..	....	
	Otapidáram ..	Melavittam	708	..	..	..	708	..	....	
		Virusampatti	294	..	..	..	294	..	....	
		Vaipar	813	..	..	..	813	..	....	
		Total ..	194,168	303·39	..	202	193,966	303·07	....	
North Malabar.	Wynaad	Palpattúr	861	..	..	..	861	..	....	
		Vengúr	2,013	..	..	..	2,013	..	....	
		Chedlet	572	..	..	..	572	..	....	
		Karpúr	1,221	..	..	..	1,221	..	....	
		Kalúr	3,757	..	..	..	3,757	..	....	
		Excluded portions of Trans-Beni.	4,300	..	..	..	4,300	..	....	
		Kudrakot	21,502	..	..	..	21,502	..	....	
		Padri	30,468	..	..	..	30,468	..	....	
		Cardamom forest	13,683	..	..	..	13,683	..	....	
		Kanot	25,600	..	..	..	25,600	..	....	
		Chapparam	112	..	..	..	112	..	....	
		Panniyatta	150	..	..	..	150	..	....	
		Adavankunnu	39	..	..	..	39	..	....	
		Total ..	104,278	162 93	..	..	104,278	162 93	....	
South Malabar.	Nilambúr ..	Nilambúr block	5,036	..	..	..	5,036	..	....	
		Pokote	761	..	..	..	761	..	....	
		Panangod	859	..	..	..	859	..	....	
		Valluvasheri	914	..	..	..	914	..	....	
		Kanakut	669	..	..	..	669	..	....	
		Erambadam	581	..	..	..	581	..	....	
		Ambalakandi	1	..	..	..	1	..	....	
		Arimbrakutamala	322	..	..	..	322	..	....	
		Mangalasheriperamba	11	..	..	..	11	..	....	
		Putalata and Chitarikal peramba ..	8	..	..	..	8	..	....	
		Muriyat	1,765	..	..	..	1,765	..	....	
		Kariyen	1,002	..	..	..	1,002	..	....	
		The Silent valley	17,280	..	..	..	17,280	..	....	
		The new Amarapalaiyam plantation.	..	..	96,000	..	96,000	..	F.S.G.G., dated 19th June 1888.	Transferred from 59-E.

Area of Reserved Lands, 1888-89—*cont.*

District	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Malabar—*cont.*	Walawanád Taluk	Attapadi Valley—								
		Block No. II	..	..	24,320	..	24,320	..	F.S.G G., dated 29th May 1888.	
		Do. No. III (*a*)	..	..	12,800	..	12,800	..		
		Do. No. III (*b*) i and III (*b*) ii ..	..	..	4,480	..	4,480	..		
		Do. No. IV (*a*), IV (*b*), and IV (*c*)	..	..	16,640	..	16,640	..		
	Pálghat ..	Chatamkulamkarai peramba ..	30	..	..	..	30	..	....	
		Tamburatta petai *alias* Pilacheripalaiyam	100	..	..	..	100	..	....	
		Tiruvazhamkunnu *alias* Panakadam	1,000	..	..	..	1,000	..	....	
		Total ..	30,339	47·41	154,240	..	184,579	288·40	....	
South Canara.	Mangalore ..	No. 5, Ullal Casuarina and Honne plantation.	58	..	..	‡ 58	..	..	....	‡ Transferred to 59-A.
		No. 10, Tannirbhavi	70	..	..	‡ 70	..	..	....	* Decrease due to modification of boundary at settlement and correction of area.
		No. 11, Todar reserve	640	..	..	* 182	458	..	....	† Transferred to 59-A 376 acres; correction of area 104 acres.
		No. 12, Hosabetta reserve	480	..	..	† 480	..	..	....	§ Increase resulting from correction of area.
		No. 13, Mujimalai reserve ..	3,200	..	..	..	3,200	..	....	¶ Of this area No. 17, Harkúr block, 1,920 acres was notified under section 4, G.O., No. 18 dated 8th March 1889.
	Udipi	Tenkahola	2,068	..	..	* 29	2,039	..	....	(*a*) Due to correction of area.
		Chinkramali	2,560	..	..	‡ 2,560	..	..	....	* Rectification of area.
		Manajekádu	420	..	§ 3	‡ 423	..	..	....	
		Durgamalai	1,773	..	..	* 171	1,602	..	....	
		Andar reserve	18,193	..	* 4141	..	22,334	..	....	
	Uppinangadi ..	Dharmastala Mundaji	9,600	..	..	..	9,600	..	....	
		Charmadikanapadi	12,800	..	..	..	12,800	..	....	
	Kasaragód ..	Parappa	7,680	..	..	..	7,680	..	....	
	Kondapur ..	....	144,000	..	..	..	¶ 144,000	..	....	
	Udipi	....	77,386	..	..	(*a*) 3,943	73,443	..	....	
	Mangalore ..	....	24,480	..	(*a*) 3213	..	27,693	..	....	
	Uppinangadi ..	....	288,000	..	..	..	228.000	..	....	
	Kasaragód ..	....	32,920	..	..	..	32,920	..	....	
		Total ..	626,328	978·64	7,357	7,916	625,769	977·76	....	
		Grand Total ..	3,297,653	5152 58	344,213	251,286	3,390,580	5,297·78	..	

Abstract of Form No. 59-D.

District.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
Chingleput	31,533	49·27	10,314	2,995	38,852	60·70
North Arcot	426,450	666·33	32,000	111,756	346,694	541·71
South do.	109,851	171·64	31,620	20,508	120,963	189·00
Salem	288,091	450·14	102,400	25,940	364,551	569·61
Trichinopoly	121,886	190·45	2,618	60,417	64,087	100·14
Tanjore	12,289	19·20	3,664	4,834	11,119	17·37
North Coimbatore	1,173,314	1,833·30	..	78	1,173,236	1,833·18
South do.	11,440	17·88	..	..	11,440	17·88
Madura	167,686	262·00	..	16,640	151,046	236·01
Tinnevelly	194,168	303·39	..	202	193,966	303·07
North Malabar	104,278	162·93	..	..	104,278	162·93
South do.	30,339	47·41	154,240	..	184,579	288·40
South Canara	626,328	978·64	7,357	7,916	625,769	977·76
Total ..	3,297,653	5,152·68	344,213	251,286	3,390,580	5,297·78

Annual Form No. 59-E.

Forest Department, Madras, Southern Circle.

Area of other Forests.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chingleput..	Saidápet	Unamanjeri	..	..	752	..	752	..	These areas were selected for reservation but not yet notified under section 4.	....
		Kumili	..	..	683	..	683	..		
		Kattur	..	..	2,894	..	2,894	..		
		Alathur	..	..	853	..	853	..		
		Illalur	..	..	702	..	702	..		
		Sirukundram A	..	..	872	..	872	..		
		Do. B	..	..	378	..	378	..		
		Hanumantaputteri	..	..	284	..	284	..		
		Pulikkaradu	..	..	176	..	176	..		
		Tambaram	..	..	262	..	262	..		
		Kadaperi	..	..	229	..	229	..		
		Selaiyur	..	..	492	..	492	..		
		Maduraipakam	..	..	359	..	359	..		
		Nanmangalam	..	..	333	..	333	..		
		Madambakam	..	..	567	..	567	..		
		Erumayur	..	..	197	..	197	..		
		Arasankalani	..	..	187	..	187	..		
		Perumbakam A	..	..	639	..	639	..		
		Do. B	..	..	117	..	117	..		
		Meyyur	..	..	534	..	534	..		
		Kovilpadugai	..	..	377	..	377	..		
		Sikkarayapuram	..	..	100	..	100	..		
		Kuttambakam	..	..	300	..	300	..		
		Mitta Nemali	..	..	262	..	262	..		
		Tirumalaivayal	..	..	389	..	389	..		
		Nandambakam	..	..	262	..	262	..		
		Tirusulam	..	..	270	..	270	..		
	Chingleput	Kavanur	568	..	..	568	..	..	G.O., No. 347, dated 16th May 1888, Revenue.	Transferred to 59-D.
		Siruvanjur	465	..	..	465	..	..		
		Orattur	312	..	..	312	..	..		
		Vadambakam	694	..	..	694	..	..		
		Vadakupattu	699	..	..	699	..	..		
		Nallur	937	..	..	937	..	..	G.O., No. 655, dated 13th September 1888.	
		Maganyam	942	..	..	942	..	..		
		Kulvay	139	..	..	139	..	..		
		Kolatur	1,899	..	..	1,899	..	..		

Area of other Forests—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chingleput—*cont.*	Chingleput—*cont.* ..	Kagar	643	..	..	643	..	..	G.O., No. 655, dated 13th September 1888.	Transferred to 59-D.
		Taiyur	1,084	..	..	1,084	..	..		
		Mambakam	766	..	..	766	..	..		
		Sonalur	1,190	..	..	1,190	..	..		
		Total ..	10,338	16·15	13,470	10,338	13,470	21·04		
North Arcot ..	....	....	..	..	..	..	..	..	....	
South Arcot	No. I, Tiruvannámalai ..	Tenmalai	16,960	..	..	..	16,960	..	....	
		Tandrampet	20	..	..	..	20	..	....	
		Kadambai	280	..	..	..	280	..	....	
		Kannamadi	25,600	..	..	..	25,600	..	....	
		Nattampallai	2,560	..	..	..	2,560	..	....	
		Ravandivadi	12,800	..	..	..	12,800	..	....	
		Porasapet	15,360	..	..	..	15,360	..	....	
		Sirupakam	11,520	..	..	..	11,520	..	....	
		Erayurmalai	5,120	..	..	..	5,120	..	....	
		Nukambadi Morkulam	32,000	..	..	..	32,000	..	....	
		Rasimalai	19,200	..	..	..	19,200	..	....	
		Veppur	25,600	..	..	..	25,600	..	....	
		Bimarapatti Attipadi	19,200	..	..	..	19,200	..	....	
		Kaludaikattimalai	7,040	..	..	..	7,040	..	....	
		Sannamalai	10,880	..	..	..	10,880	..	....	
		Tachampet including Atipakum.	29,080	..	..	..	29,080	..	....	
		Kolamanjanur	3,200	..	..	..	3,200	..	....	
		Pudupalaiyam	6,400	..	..	..	6,400	..	....	
		Tiruvannámalai timber yard ..	4	..	..	..	4	..	....	
		Javadi slopes from Bandirevu to Madagarai in Salem district.	25,600	..	..	..	25,600	..	....	
		Damaraikadu in North Arcot district.	7,880	..	..	..	7,880	..	....	
	No. II, Tindivanam ..	Vailamur Timmippendrug ..	10,240	..	..	..	10,240	..	....	
		Kotenmalai near Padipallam block.	392	..	..	..	392	..	....	
		Vellimodu	2,560	..	..	..	2,560	..	....	

Area of other Forests—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
South Arcot—*cont.*	No. II, Tindivanam—*cont.*	Minamurmalai	3,840	..	..	..	3,840	..	....	
		Valeti	1,280	..	..	..	1,280	..	....	
		Pattuvoy	1,280	..	..	..	1,280	..	....	
		Kilsevur	1,280	..	..	..	1,280	..	....	
		Nadukuppam to Bramhadesam	3,840	..	..	..	3,840	..	....	
		Parikalpet	70	..	..	..	70	..	....	
	No. III, Villupuram	Odaiyanattam and Kadiyam	6,400	..	..	..	6,400	..	....	
		Ariyalur forest	150	..	..	..	150	..	....	
		Pallipudupet	180	..	..	..	180	..	....	
		Panjamadevi	50	..	..	..	50	..	....	
		Puntotam	50	..	..	..	50	..	....	
		Sattipattu	50	..	..	..	50	..	....	
		Periyapuram	50	..	..	..	50	..	....	
	No. IV, Cuddalore	Selambanadampettai	640	..	..	..	640	..	....	
		Badrakottai	1,281	..	..	..	1,281	..	....	
		Velankuppam	2,560	..	..	..	2,560	..	....	
		Kanijiruppu	600	..	..	..	600	..	....	
		Vengadampettai, 15th milestone.	250	..	..	..	250	..	....	
	No. IV, Chidambaram	Pinnalur Wálajápet tank block	1,600	..	..	..	1,600	..	....	
		Virinjipuram and Kandachipuram.	2,560	..	..	..	2,560	..	....	
		Kuttadai	640	..	..	..	640	..	....	
		Timmachur to Gadilam river	4,920	..	..	..	4,920	..	....	
	No. V, Tirukoilúr	Chikkadu	4,920	..	..	..	4,920	..	....	
		Paiyur	50	..	..	..	50	..	....	
		Kolatur	70	..	..	..	70	..	....	
		Mambakam	40	..	..	..	40	..	....	
		Sikkampet	50	..	..	..	50	..	....	
		Muttalur	50	..	..	..	50	..	....	
		Kodiyur	50	..	..	..	50	..	....	
	No. VI, Kallakurchi	Ponparappi forest	9,600	..	..	..	9,600	..	....	
		Kadambur	3,100	..	..	..	3,100	..	....	
		Lalapet forest including Chittal.	14,500	..	..	..	14,500	..	....	
		Tagarai Kachirajapalaiyam	15,000	..	..	..	15,000	..	....	
		Parigam	2,000	..	..	..	2,000	..	....	
		Kanai	3,000	..	..	..	3,000	..	....	
		Poigunnamalai	1,000	..	..	..	1,000	..	....	
		Palavalam	2,000	..	..	..	2,000	..	....	
		Rangappanur	1,000	..	..	..	1,000	..	....	

Area of other Forests—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
South Arcot—*cont.*	No. VII, Vriddhachalam	Kammapuram	1,400	..	..	..	1,400	..	....	
		Kodanur, south of 45th mile-stone.	1,000	..	..	..	1,000	..	....	
		Wuyakondravi and Kottayam ..	2,000	..	..	..	2,000	..	....	
		Block near 25th mile-stone ..	150	..	..	..	150	..	....	
		Podur	1,920	..	..	..	1,920	..	....	
		Kolatur	1,280	..	..	..	1,280	..	....	
		Periyanesalur	1,280	..	..	..	1,280	..	....	
		Total ..	388,527	607·08	..	..	388,527	607·08		
		Fresh selections.								
	Atúr	Manur	..	..	4,000	..	4,000	..	....	Proposals to notify these blocks under section 4 of the Act have been submitted and no orders have as yet been received.
		Pattimedu extension	..	..	1,200	..	1,200	..	....	
		Tumkal	..	..	4,800	..	4,800	..	....	
	Tirupatúr	Neckanamalai	..	..	2,300	..	2,300	..	....	
		Proposed reserves.								
Salem ..	Atúr	Gengavilli	..	..	7,040	..	7,040	..	....	
		Manmalai	..	..	5,120	..	5,120	..	....	
		Jadayagounden Nad	..	..	11,220	..	11,220	..	....	
		Mavar	..	..	2,000	..	2,000	..	....	
		Sengad	..	..	1,000	..	1,000	..	....	
		Pyle Nad	..	..	7,000	..	7,000	..	....	
		Varagur extension	..	..	500	..	500	..	....	
	Namakal	Gundur Nad	..	..	8,500	..	8,500	..	....	
		Shetur Nad	..	..	9,000	..	9,000	..	....	
	Uttankarai	Pillapatti extension	..	..	3,200	..	3,200	..	....	
		Tumbakal do.	..	..	3,840	..	3,840	..	....	
		Puvampatti do.	..	..	1,920	..	1,920	..	....	
		Chitteri do.	..	..	2,880	..	2,880	..	....	
		Chittilingi do.	..	..	2,880	..	2,880	..	....	
		Kottapatti do.	..	..	11,520	..	11,520	..	....	
		Tirtamalai	..	..	2,560	..	2,560	..	....	
		Morappur	..	..	1,920	..	1,920	..	....	
		Wonnagiri	..	..	2,240	..	2,240	..	....	

Area of of other Forests—*cont.*

District.	Range	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Salem—*cont.*	Uttankarai—*cont.*	Ponnagarapatti	..	..	3,840	..	3,840	..	....	
		Naikanur	..	..	2,720	..	2,720	..	....	
		Singarapet extension	..	..	1,600	..	1,600	..	....	
	Tirupatúr	Yelagiri Southern reserve	..	..	1,500	..	1,500	..	....	
		Andiyappanur	..	..	2,796	..	2,796	..	....	
		Govindapuram	..	..	156	..	156	..	....	
		Inner Javadis	..	..	20,263	..	20,263	..	....	
		Nagalutu	..	..	1,500	..	1,500	..	....	
	Krishnagiri	Narlapalli	..	..	5,444	..	5,744	..	....	
		Vartampalli	..	..	2,216	..	2,216	..	....	
		Dowlatabad	..	..	2,065	..	2,065	..	....	
		Pennar	..	..	2,094	..	2,094	..	....	
		Tattakal	..	..	857	..	857	..	....	
		Kaveripatnam	..	..	2,400	..	2,400	..	....	
	Hosúr	Sanimavu	..	..	5,600	..	5,600	..	....	
		Kempakari	..	..	5,280	..	5,280	..	....	
		Marandahalli	..	..	1,920	..	1,920	..	....	
		Panjapalli	..	..	10,880	..	10,880	..	....	
		Galigattam	..	..	6,080	..	6,080	..	....	
		Kestur extension	..	..	3,600	..	3,600	..	....	
		Talli do.	..	..	4,320	..	4,320	..	....	
		Ubbarani	..	..	7,680	..	7,680	..	....	
		Kachuvadi	..	..	7,040	..	7,040	..	....	
		Hudaiduyam	..	..	8,960	..	8,960	..	....	
		Maniyambadi	..	..	5,120	..	5,120	..	....	
		Hulibanda extension	..	..	2,240	..	2,240	..	....	
		Amisonai	..	..	1,200	..	1,200	..	....	
		Total	..	..	216,311	..	216,311	337·99		
Trichinopoly	....	....	..	..	..	..	..	..	....	
Tanjore	Southern Range	Kariyapatnam	188	..	..	..	188	..	....	
		Valligadangu	40	..	..	..	40	..	....	
		Vanduvancheri	150	..	..	..	150	..	....	
		Mudupet	300	..	..	..	300	..	....	
		Kovilpadu	137	..	..	..	137	..	....	

Area of other Forests—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Tanjore—*cont.*	Southern Range—*cont.*	Vanavamahadevi	380	..	..	..	380	..	....	
		Vallapallam								
		Pushpavanam	500	..	..	..	500	..	....	
		Periyakudagai	366	..	..	..	366	..	....	
		Total ..	2,061	3·22	..	..	2,061	3·22		
North Coimbatore.	....	....	..	..	..	..	..	..	....	
South Coimbatore.	....	....	..	..	..	..	..	..	....	
Madura	No. I or Uttamapalaiyam.	Detached hills and Karadus in the Cumbum valley.	787	..	..	..	787	..	....	
		Government portion of Aggamalais.	9,280	..	..	..	9,280	..	....	
	No. II or Kodaikánal ..	Andipatti hills	12,800	..	..	..	12,800	..	....	
		Upper Palni plateau	32,000	..	..	..	32,000	..	....	
	No. III or Dindigul ..	Portion of the slopes of Sirumalais.	640	..	..	..	640	..	....	
		Detached hills near Aiyalur ..	9,600	..	..	..	9,600	..	....	
		Do. near Kanavoipatti.	3,840	..	..	..	3,840	..	....	
		Guriyalapatti	..	..	* 130·52	..	130·52	..	G.O., No. 868, dated 15th Dec. 1888.	* Transferred from 59-A.
	No. IV or Mattupatti ..	A portion of Manjamalais ..	4,800	..	..	..	4,800	..	....	
		Nagamalai	..	..	* 2,356	..	2,356	..	G.O., No. 868, dated 15th Dec. 1888.	
	No. V or Alagar hill ..	Nedumalais	3,840	..	..	..	3,840	..	....	
		Mudugamalai								
		Vellamalai	..	..	* 2,700	..	2,700	..	G.O., No. 868, dated 15th Dec. 1888.	Nedumalais and Perumamalai were transferred from No. IV range.
		Perumamalai								
		Pudupatti	..	..	* 127	..	127	..		
		Sekkumangalam	..	..	* 468	..	468	..		
		Total ..	77,587	121·23	5,781	..	83,368	130·26		

Area of other Forests—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Tinnevelly ..	Tenkarai	Paramankurchi	1,133	..	..	..	1,133	..	....	
	Nángunéri	Arasur	6,831	..	..	..	6,831	..	....	
		Kuttam	2,860	..	..	..	2,860	..	....	
		Total ..	10,824	16·91	..	..	10,824	16·91		
North Malabar.	Wynaad	Manatana	214,400	335 00	..	..	214,400	335·00	....	
South Malabar.	Pálghat	Forest land near Dhoni	150	..	..	..	150	..	....	
	Nilambúr	The new Amarapalaiyam plantation.	96,000	..	...	96,000	..	..	....	Transferred to 59-D.
		Total ..	96,150	150 23	...	96,000	150	·23		
South Canara.	....	....	..	..	..	..	..	..	....	
		Grand Total ..	799,887	1,249·82	235,562	106,338	929,111	1,451·73		

ABSTRACT.

Chingleput ..	....	....	10,338	16·15	13,470	10,338	13,470	21·04	....	
North Arcot ..	....	....	..	..	..	..	..	..	....	
South Arcot ..	....	....	388,527	607·08	..	..	388,527	607·08	....	
Salem ..	....	....	..	..	216,311	..	216,311	337'99	....	
Trichinopoly ..	....	....	..	..	..	..	..	..	....	
Tanjore ..	....	....	2,061	3·22	..	..	2,061	3·22	....	
North Coimbatore.	....	....	..	..	..	..	..	..	....	
South Coimbatore.	....	....	..	..	..	..	..	..	....	
Madura ..	....	....	77,587	121·23	5,781	..	83,368	130·26	....	
Tinnevelly ..	....	....	10,824	16·91	..	..	10,824	16·91	....	
North Malabar.	....	....	214,400	335·00	..	..	214,400	335·00	....	
South Malabar.	....	....	96,150	150·23	..	96,000	150	·23	....	
South Canara.		....	..	..	..	..	..	..	....	
		Total ..	799,887	1,249·82	235,562	106,338	929,111	1,451·73		

Annual Form No. 60.

Forest Department, Madras, Southern Circle.

Area of Plantations, 1888-89.

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
		Regular Plantations.							
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Chingleput ..	Chingleput ..	Maiyúr, Pilapúr and Mamandúr	263 3	21,662	..	593	263 3	22,255	
		Wálajábád	14·55	2,145	..	212	14·55	2,357	
		Hanumantaputéri	12				12		
		Melamaiyúr	24	4,360	..	84	24	4,444	
		Vembakam	8				8		
		Nazaretpet	71·54	1,763	..	46	71·54	1,809	
		Add charges incurred in 1883-84, but adjusted during the month of August 1888.	..	..	..	22	..	22	
		Total ..	396·09	29,930	..	957	396·09	30,887	
North Arcot ..	Chandragiri ..	Gazerlamandiam	250	3,494	— *250	..	..	3,494	* Merged in reserved forests and excluded from plantation area as per para. 8 of Conservator's Inspection memo. in Board's Proceedings, dated 13th April 1887, Forest No. 198 (Land Revenue).
	Gudiyátam ..	Tiruvallam	435	34,944	..	1,617	435	36,561	
		Virinjipuram	260	23,195	.. ..	1,416	260	24,611	
		Ammerdi	160	6,762	..	928	160	7,690	
	Wálajápet ..	Vanivédu	30	3,055	..	297	30	3,352	
	Arcot	Kilminnel	150	12,746	..	991	150	13,737	
	Vellore ..	Ammerdi	25	4,512	— *25	..	..	4,512	
		Total ..	1,310	88,708	— 275	5,249	1,035	93,957	
South Arcot ..	No. I, Tiruvannámalai.	Chengam	8	1,267	..	..	8	1,267	
	No. II, Tindivanam.	Agaram	106	8,311	..	115	106	8,426	
		Akshikadu	107	3,168	..	229	107	3,397	
	No. IV, Cuddalore.	Talangoda	165	10,338	..	265	165	10,603	
		Fort St. David	38	5,160	..	141	38	5,301	
		Shonankuppam	195	10,123	..	234	195	10,357	
		Donitorai and other salt topes around ..	90·97	3,217	..	104	90·97	3,321	
		Nochikádu	364·46	10,560	..	264	364·46	10,824	
		Periyakuppam	444·52	8,477	..	151	444·52	8,628	
		Amount of land-rent paid for plantations within the Municipality of Cuddalore town.	..	1,051	..	210	..	1,261	
	No. IV, Chidambaram.	Killai plantation	74·50	2,968	..	70	74·50	3,038	
		Coleroon mouth plantation	49·14	1,855	..	52	49·14	1,907	
		Periyapet plantation	115·46	1,270	..	55	115·46	1,325	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
South Arcot—*cont.*	No. V, Tirukoilúr.	Malatar bed plantation	27	30,101	..	..	27	30,101	
		Velúr	..	2,563	..	..	..	2,563	
		Add pay of the manager and his gumastah in charge of Tirukoilúr plantation.	..	916	..	..	..	916	
		Total ..	1,785·05	1,01,345	..	1,890	1,785·05	1,03,235	
Salem	....		..	..	..	..	..	..	
Trichinopoly	Trichinopoly ..	Punganúr	425	641	..	60	425	701	
		Elamanúr	117·10	12,893	..	252	117·10	13,145	
		Pettuvaittalai	137	461	..	88	137	549	
		Kulitalai	77·18	10,935	..	252	77·18	11,187	
		Manatattai	44·86	4,902	..	363	44·86	5,265	
		Lálápet	268·20	7,116	..	440	268·20	7,556	
	Kulitalai ..	Ambásamudram	319	575	..	52	319	627	
		Mahadanapuram	191	368	..	48	191	416	
		Sittalavoi	160·32	8,164	..	256	160·32	8,420	
		Sekkanam	119	3,120	..	60	119	3,180	
		Kattalai	74·35	8,275	..	264	74·35	8,539	
		Pudúr	141	874	..	57	141	931	
		Maiyanúr	50	355	..	85	50	440	
		Kolamánikkam	242	6,570	..	367	242	6,937	
		Aramsaikurchi	91	2,524	..	12	91	2,536	
		Karaipakam	107	2,894	..	97	107	2,991	
	Udayárpálaiyam.	Tiruvenganúr	185	2,374	..	55	185	2,429	
		Varappakurchi	192	1,974	..	89	192	2,063	
		Sattambadi	105	2,361	..	..	105	2,361	
		Sripurandan	486	3,775	..	167	486	3,942	
		Valakurchi	130	614	..	99	130	713	
		Annagarampet	92	1,927	..	151	92	2,078	
		Total ..	3,754·01	83,692	..	3,314	3,754·01	87,006	
Tanjore	Northern ..	Tranquebar, No. I	52	..	..	..	52	..	
		Do. No. II	92	..	..	..	92	..	
		Vettangudi	453	..	..	1,256	453	..	
		Kodiyampalaiyam	60	..	..	48	60	..	
		Neidávasal	51	..	..	..	51	..	
		Total ..	708	11,451	..	1,304	708	12,755	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
North Coimbatore.	Kollegál	Bylúr	97	32,175	..	949	97	33,124	Sandalwood plantations.
South Coimbatore.	Tunakadavu ..	No. I, Plantation	8·5	4,402	..	53	8·5	4,455	These are the plantations in No. I reserve on the Anaimalais.
		,, II, do.	8				8		
		,, III, do.	3				3		
		Total ..	19·5	4,402	..	53	19·5	4,455	
Madura ..	No. I, Uttamapalaiyam.	Vannatiparai teak plantation	4	1,391	..	2	4	1,393	
	No. II, Kodaikánal.	Kodaikánal Eucalyptus plantation	8	3,566	..	204	8	3,770	
		Kodaikánal Acacia plantation	5·50				5·50		
		Kodaikánal-Parappar plantation	11·50	1,026	* 4·50	86	16	1,112	* Rectification of error in previous year.
		Vilamkombai	4·14	976	..	1	4·14	977	
		Pumbarai	3	533	..	..	3	533	
		Kodaikánal scattered plantation	3	1,081	..	..	3	1,081	
		Gunden shola plantation	5	339	* 15	† 1,361	20	1,700	† New planting.
		Total ..	44·14	8,912	19·50	1,654	63·64	10,566	
Tinnevelly ..	....	....	..	..	..	..	..	..	
North Malabar..	....	Kanot teak plantation	41·50	3,289	..	322	41·50	3,711	
South Malabar..	Nilambúr ..	Amarapalaiyam reserve	408·77	..	..	..	408·77	..	
		Chatambarai do.	498·10	..	..	..	498·10	..	
		Nellikutta do.	120·23	..	..	..	120·23	..	
		Aravillikombai do.	134·86	..	..	..	134·86	..	
		Aruvakód do.	111·44	..	..	..	111·44	..	
		Edakód	692·52	..	..	..	692·52	..	
		Elanjiri	337·76	..	..	..	337·76	..	
		Ramalór	21·33	..	..	..	21·33	..	
		Mulatmunna	71·56	..	..	..	71·56	..	
		Panangód reserve	590·09	..	..	..	590·09	..	
		Valuvasheri do.	584·00	..	‡ 117·24	..	701·24	..	‡ Third block of planting teak with mahogany standard, 1888-89. Actual area.
		Mangalasheri do.	10·74	..	..	..	10·74	..	
		Ambalakandi do.	1·01	..	..	..	1·01	..	
		Chittarikal and Puttalat	8·35	..	..	..	8·35	..	
		Arimbrakuta	21·75	..	..	..	21·75	..	
		Total ..	3,612 51	2,25,168	117·24	8,759	3,729·75	2,33,927	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
South Canara	Mangalore	Ullal casuarina and Honne plantations	57·11	1,598	..	170	57·11	1,768	
		Tannirbavi casuarina plantations	44	2,401	* 10	851	54·	3,252	* New planting.
	Kásaragód	Parappar teak plantation	50	16,657	† 2·08	60	52·08	16,717	† Result of Survey.
		Total	151·11	20,656	12·08	1,081	163·19	21,737	
		Grand Total of Regular Plantations	11,918·91	6,09,828	— 275 + 148·82	25,532	11,792·73	6,35,360	
			CULTURAL OPERATIONS.						
Direction	....	....	..	1,141	..	..	..	1,141	
Chingleput	....	....	..	..	..	..	..	..	
North Arcot	....	....	..	..	..	..	..	..	
South Arcot	Cuddalore	Ramapuram	70	..	..	..	70	..	
		Forests in Tindivanam and Villupuram	593	32	..	..	593	32	
		Forests in Cuddalore, Vriddháchalam and Chidambaram.	663	345	..	..	663	345	
		Add charges incurred for carriage and maintenance, &c., of exotic plants planted in forests, but debited to A-VIII *d*.	..	393	..	259 — ‡ 12	..	640	‡ As per Examiner's accounts.
		Total	1,326	770	..	247	1,326	1,017	
Salem	....	....	..	..	..	..	..	..	
Trichinopoly	Trichinopoly	Kaduvoi bank, Melúr	Mls. 6	54	..	..	Mls. 6	54	
		Peruvalai bank	,, 2	133	..	..	,, 2	133	
		Coleroon left bank trunk road to Alambadi	,, 22	5,523	..	680	,, 22	6,203	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Trichinopoly—*cont.*	Udayárpálaiyam.	Naddiyur project	Mls. *4	2,267	..	..	Mls. 4	2,267	
		Coleroon left bank, Sembiyagudi to Vaippúr ..	,, 21	7,547	..	..	21	7,547	
		Panneri main channel	,, 19	7,094	..	..	19	7,094	
		Do. branch channel	,, 16	2,199	..	..	16	2,199	
		Lower anicut line	,, 10	3,457	..	..	10	3,457	
		Vadavar padugai	..	3	..	..	..	3	
	Musiri	Kenathur	..	..	..	38	..	38	
		Total ..	Mls. 100	28,277	..	718	Mls. 100	28,995	
Tanjore ..	Southern Range.	Nadúr	27	4	75	42	102	46	
		Ichankottai	9	9	..	..	9	9	
		Kollangarai	21	..	..		21		
		Karungulam Mélpadi	5	..	..	11	5	11	
		Marungulam	20	..	..		20		
		Avelikudi	10	..	10	3	20	3	
		Nadukavéri Natarajapuram	9	..	..	..	9	..	
		Nannillam	2	..	..	..	2	..	
		Odiyandévi	20	..	..	..	20	..	
		Edangankottai Meliyúr	7	..	30	7	37	7	
		Thirteen topes in Pudukóta taluk	135	..	..	..	135	..	
		Védaranyam (date garden)	21	148	..	59	21	207	
		Puthur, No. I	..	..	45	11	45	11	
		Peraiyur	..	..	2	..	2	..	
		Ponnapur	..	..	5	* 6	5	6	* Includes Rs. 5 added by the Examiner.
		Vaduvur	..	..	40	10	40	10	
	Northern Range.	Kattucheri	15	143	..	..	15	143	
		Kalliyappanullúr	18	138	..	..	18	138	
		Mudikondanullúr	25	136	..	48	25	184	
		Vettangudi	520	403	..	276	520	679	
		Total ..	864	981+286 = 1,267	† 207	473	1,071	1,454+286 = 1,740	† This area was dibbled over with cashew-nut during the year.
North Coimbatore.	..	....	..	..	..	..	..	..	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total area.	Total cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
South Coimbatore.	..	....	..	..	..	..	..	..	
Madura	..	....	..	..	..	..	..	..	
Tinnevelly ..	Tenkarai sub-range.	Kudiraimalai reserve	1,059·93	1,561	* 264	443	1,323·93	2,004	* New planting.
		Kotamadakikádu	2·50	35	..	..	2 50	35	
	Southern range, Ambásamudram.	Pachaipil Teri and Inji tanalam	..	..	* 10	51	10	51	
		Ollar	..	..	* 3	15	3	15	
		Kannikatti	..	..	* 1·50	8	1·50	8	
		Cost of temporary establishment	..	..	..	70	..	70	
		Total ..	1,062·43	1,596	278·50	587	1,340·93	2,183	
North Malabar.	..	Rubber experiments	..	784	..	..	..	784	
		Cost of cardamom cultivation	109	776	..	58	109	834	
		Total ..	109	1,560	..	58	109	1,618	
South Malabar..	..	....	..	..	..	..	..	..	
South Canara..	Uppinangudi .. Kásaragód .. Kondapúr .. Mangalore ..	Experimental cultivation of giant bamboos ..	..	28	..	10	..	38	
		Total ..	..	28	..	10	..	38	
		Grand Total of Cultural Operations ..	3,361·43 Mls. 100	34,639	485·50	2,093	3,846·93 Mls. 100	36,732	

Abstract of Form No. 60.

District.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.	
	Area.	Cost.	Area.	Cost.	Total area.	Total cost.
Regular Plantations.						
	Acs.	Rs.	Acs.	Rs.	Acs.	Rs.
Chingleput	396·09	29,930	..	957	396·09	30,887
North Arcot	1,310	88,708	— 275	5,249	1,035	93,957
South do.	1,785·05	1,01,345	..	1,890	1,785·05	1,03,235
Salem	..	..	..	..	..	..
Trichinopoly	3,754·01	83,692	..	3,314	3,754·01	87,006
Tanjore	708	11,451	..	1,304	708	12,755
North Coimbatore	97	32,175	..	949	97	33,124
South do.	19·5	4,402	..	53	19·5	4,455
Madura	44·14	8,912	19·50	1,654	63·64	10,566
Tinnevelly	..	..	..	..	..	..
North Malabar	41·50	3,389	..	322	41·50	3,711
South do.	3,612·51	2,25,168	117·24	8,759	3,729·75	2,33,927
South Canara	151·11	20,656	12·08	1,081	163·19	21,737
Total ..	11,918·91	6,09,828	— 275 148·82	25,532	11,792·73	6,35,360
Cultural Operations.						
Direction	..	1,141	..	..	..	1,141
Chingleput	..	..	..	..	..	..
North Arcot	..	..	..	..	..	..
South do.	1,326	770	..	247	1,326	1,017
Salem	..	..	..	..	..	..
Trichinopoly	Mls. 100	28,277	..	718	Mls. 100	28,995
Tanjore	864	1,267	207	473	1,071	1,740
North Coimbatore	..	..	..	..	..	..
South do.	..	..	..	..	..	..
Madura	..	..	..	..	..	..
Tinnevelly	1,062·43	1,596	278·50	587	1,340·93	2,183
North Malabar	109	1,560	..	58	109	1,618
South do.	..	..	..	..	..	..
South Canara	..	28	..	10	..	38
Total ..	3,361·43 Mls. 100	34,639	485·50	2,093	3,846·93 Mls. 100	36,732

Annual Form No. 61.

Forest Department, Madras, Southern Circle.

Annual list of Topes and Experimental Gardens, 1888-89.

District.	Range.	Number.	Chief Trees.	Area.	Cost		Remarks.
					During year.	To end of year.	
				ACS.	RS.	RS.	
Chingleput ..	Chingleput	7	Mango, margosa, casuarina, iluppai, cocoanut and Ingadulcis	63	120	7,143	
	Saidápet	1	Kodukaipulli and mango	30	126	831	
	Total ..	8		93	246	7,974	
North Arcot ..	Chittoor	13	Date, tamarind, cocoanut and palmyra	..	226	761	
	Chandragiri	29	Do. do. do.	..	132	276	
	Palmanér	13	Mango, iluppai, tamarind, cocoanut and casuarina.	132	334	7,287	
	Gudiyátam	*120-1	Palmyra, do. do. do. ..	61	49	15,448	* 1 tope given over to South Indian Railway.
	Vellore	42	Mango, palmyra and tamarind	504	126	1,143	
	Pólúr	12	Do. do. do.	..	90	281	
	Arcot	113	Mango, palmyra, tamarind and iluppai	..	58	173	
	Wálajáh	37	Do. do. do. do.	46	92	5,672	
	Wandiwash	262	Do. do. do. do.	..	29	35	
	Total ..	640		743	1,136	31,076	
South Arcot ..	No. I. Tiruvannámalai	34	Tamarind, iluppai, nagai, vembu, mango and kattu-vagai	118	..	..	
	,, II. Tindivanam	7	Do. do. do. do. ..	35	..	..	
	,, III. Villupuram	14	Tamarind, iluppai, kattuvagai, margosa, mango, sandal and casuarina	77	..	..	
	,, IV. Cuddalore	2	Tamarind, iluppai, karuvelam, mango and nagai ..	12	..	..	
	,, IV. Chidambaram	4	Karuvelam, portia, tamarind, palmyra, and iluppai.	17	..	..	
	,, V. Tirukoilúr	17	Tamarind, margosa, iluppai, mango and vagai ..	33	..	..	
	,, VI. Kallakurchi	9	Tamarind, iluppai, margosa, karuvelam and velvelam	66	..	..	
	,, VII. Vriddháchalam	7	Tamarind, palmyra, mango, banyan, odiyan and konnai	36	..	..	
	Total ..	94		394	..	8,712	
Salem	Salem	64	Mango, tamarind, margosa, nagai, iluppai, cocoa-nut and vagai	634	..	58,456	
	Atúr	17	Cocoanut, tamarind, iluppai and margosa	188	..	9,357	
	Námakal	16	Cocoanut, tamarind, iluppai, margosa, vagai and mango	58	..	7,164	
	Tiruchengód	14	Mango, cocoanut, tamarind, margosa and iluppai ..	107	..	4,594	

Annual list of Topes and Experimental Gardens, 1888-89—*cont.*

District.	Range.	Number.	Chief Trees.	Area.	Cost. During year.	Cost. To end of year.	Remarks.
				Acs.	Rs.	Rs.	
Salem—*cont.* ..	Utankarai	35	Tamarind, mango, nim and palmyra	252	..	31,525	
	Tirupatúr	23	Mango, tamarind, iluppai, vagai and palmyra ..	222	..	8,708	
	Krishnagiri	21	Iluppai, mango, tamarind, margosa, palmyra, karuvelam and nagai	358	..	29,141	
	Dharmapuri	31	Tamarind, illuppai, mango and sandalwood ..	492	..	17,167	
	Hosúr	42	Casuarina, illuppai, punga, nagai, mango and sandalwood	750	..	28,899	
	Total ..	263		3,061	1,583	1,95,011 + 1,583 =1,96,594	
Trichinopoly ..	Trichinopoly	8	Mango, illuppai and sissu	32	8	1,319	
	Kulitalai	4	Tamarind and sissu	21	..	168	
	Musiri	2+1*	Mango and tamarind	17	..	..	* One tope (13 acres) handed over by Revenue Department.
	Perambalúr	1	Mango	9	..	292	
	Udayárpálaíyam	1	Do.	2	..	..	
	Total ..	17		81	8	1,779	
Tanjore	....	16	Cocoanut and mango	153	..	..	
North Coimbatore.	Satyamangalam	3	Palmyra	21	..	2,328	
	Kollegál	4	Karuvelam and tamarind	303	..	576	
	Bhaváni	26	Mango, palmyra and karuvelam	372	..	1,799	
	Erode	52	Palmyra, tamarind, velvelam, margosa, cork, cogai and karuvelam	614	100	13,169	
	Dhárápuram	76	Karuvelam, velvelam, tamarind, palmyra, margosa, cocoanut and velam	12,483	..	25	
	Karúr	22	Palmyra, cocoanut and tamarind	247	..	10,882	
	Total ..	183		14,040	100	28,779	
South Coimbatore.	Palladam	6	Palmyra, tamarind, karuvelam, velvelam, teak and sandalwood	101	..	5,197	
	Coimbatore	1	Cocoanut	2	11	11	Handed over by the Revenue Department during the year to the Forest Department for an auxiliary timber depôt.
	Total ..	7		103	11	5,208	

Annual list of Topes and Experimental Gardens, 1888-89—*cont.*

District.	Range.	Number	Name of tope.	Chief Trees.	Area.	Cost		Remarks.
						During year.	To end of year.	
					ACS.	RS.	RS	
Madura ..	No. I. Uttamapalaiyam ..	7	..	Tamarind, iluppai, vembu, karuvelam, vagai, mango, bamboo, naval, sandal and mahogany ..	11	47	3,856	
	,, II. Kodaikánal ..	5	..	Tamarind, iluppai, vagai, velam and mahogany ..	19	96	3,096	
	,, III. Dindigul	9	..	Tamarind, mango, iluppai, karuvelam, vagai, naval, palmyra and velvelam	54	..	3,740	
	,, V. Alagar hill	2	..	Margosa, tamarind, vagai, jack, mango, iluppai ..	17	141	1,191	
				Added by the Examiner on account of pay of watchers	..	1,306	1,306	
	Total ..	23	..		101	1,590	13,189	
Tinnevelly ..	Tinnevelly	4	..	Mango, tamarind, gooseberry and palmyra ..	35	90	631	
	Otapidáram	2	..	Mango, bamboo, iluppai and casuarina	11	..	328	
	Sátúr	2	..	Bamboo, naval, vagai and tamarind	3	..	554	
	Sankaranainárkoil	5	..	Mango, iluppai, bamboo and jack	14	1	657	
	Tenkási	8	..	Mango, marudu, vagai, casuarina and tamarind ..	15	..	503	
	Ambásamudram	3	..	Vagai, marudu, margosa, iluppai and tamarind ..	9	..	504	
	Nángunéri	4	..	Mango, iluppai, bamboo, banyan, margosa, vagai and tamarind	19	85	1,049	
	Total ..	28	..		106	176	4,226	
North Malabar ..	Wynaad sub-division ..	1	Experimental garden, Manantoddy.	Eucalyptus, Ceara rubber, cinchona .. .. / Mahogany, sappan, Ficus elastica, bamboos, &c. ..	20	(*b*) 339	2,610	(*b*) Includes Rs 131 on account of bamboo nursery, &c., as per Examiner's accounts.
	Total ..	1	..		20	339	2,610	
South Malabar ..	Pálghat	2	..	Mango, jack trees and Pongamia glabra	3	..	9	
South Canara ..	....	..	..	....	..	..	..	
	Grand Total ..	1,282	..		18,898	5,189	3,00,156	

Abstract of Form No. 61.

District.	Number.	Area.	Cost		Remarks.
			During year.	To end of year.	
		Acs.	Rs.	Rs.	
Chingleput	8	93	246	7,974	
North Arcot	640	743	1,136	31,076	
South Arcot	94	394	..	8,712	
Salem	263	3,061	1,583	1,06,594	
Trichinopoly	17	81	8	1,779	
Tanjore	16	153	..	..	
North Coimbatore	183	14,040	100	28,779	
South do.	7	103	11	5,208	
Madura	23	101	1,590	13,189	
Tinnevelly	28	106	176	4,226	
North Malabar	1	20	339	2,610	
South do.	2	3	..	9	
South Canara	..	..	..	..	
Total ..	1,282	18,893	5,189	3,00,156	

Annual Form No. 62.

Forest Department, Madras, Southern Circle.

Area of Forest Tracts protected from fire during 1888-89.

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Tiruvallúr Range.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
Chingleput ..	Kambakam hills	7,329	2,154 0 0	14,951	..	14,951	447 0 0	2,601 0 0	1883-84	
	Nágalápuram hills	8,345	12 0 0	8,345	6	8,339	153 0 0	165 0 0	1887-88	
	Total ..	15,674	2,166 0 0	23,296	6	23,290	600 0 0	2,766 0 0		
	Specially Protected.									
	Pólúr Range.									
	Karnatic ghur	6,469	1,393 0 0	7,069	600	6,469	140 0 0	1,533 0 0	1881	
	Vellore Range.									
	Tellai	15,101	1,479 0 0	15,101	6	15,095	143 0 0	1,622 0 0	1881	
	Ambúr fuel	3,840	1,108 0 0	3,840	..	3,840	193 0 0	1,301 0 0	1879	
	Palamadi	6,400	455 0 0	6,400	..	6,400	84 0 0	539 0 0	1880	
	Chandragiri Range.									
	Napier	8,772	1,325 0 0	8,772	..	8,772	183 0 0	1,508 0 0	1880	
	Mámandúr	1,776	1,325 0 0	1,776	..	1,776	119 0 0	1,444 0 0	1874	
	Chamala	9,600	265 0 0	9,600	103	9,497	79 0 0	344 0 0	1880	
	Panapak	6,400	214 0 0	6,400	..	6,400	90 0 0	304 0 0	1880	
	Pudipatla bail	2,560	222 0 0	2,560	..	2,560	61 0 0	283 0 0	1880	
North Arcot ..	Mamandur extension	..	..	8,000	..	8,000	24 0 0	24 0 0	1888	
	Chittoor Range.									
	Paradarami	15,182	230 0 0	15,242	..	15,242	66 0 0	296 0 0	1880	
	Airala	5,760	194 0 0	6,400	15	6,385	34 0 0	228 0 0	1880	
	Chittur	360	179 0 0	360	..	360	14 0 0	193 0 0	1882	
	Santapet	2,276	41 0 0	2,276	..	2,276	24 0 0	65 0 0	1882	
	Bommasamudram	786	131 0 0	1,426	..	1,426	25 0 0	156 0 0	1884	
	Chilapalli	1,296	68 0 0	1,296	..	1,296	15 0 0	83 0 0	1884	
	Kinatipalli	1,414	39 0 0	1,417	..	1,417	16 0 0	55 0 0	1884	
	Chittaparai	..	..	4,850	..	4,850	3 0 0	3 0 0	1888	
	Bassavapalli	..	..	2,027	..	2,027	3 0 0	3 0 0	1888	
	Mohimundalam	..	..	2,522	..	2,522	3 0 0	3 0 0	1888	
	Penumore	6,400	..	6,400	..	6,400	2 0 0	2 0 0	1888	Transferred from General Protection.
	Pachigunta	..	..	1,800	..	1,800	2 0 0	2 0 0	1888	
	Virisettipallai	..	..	7,587	..	7,587	3 0 0	3 0 0	1888	

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Palmanér Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
North Arcot—*cont.*	Mortana	16,000	671 0 0	16,000	..	16,000	139 0 0	810 0 0	1884	
	Musalimadugu	9,600	204 0 0	9,600	..	9,600	64 0 0	268 0 0	1884	
	Peddur	9,600	541 0 0	9,600	1,280	8,320	112 0 0	653 0 0	1880	
	Basvireddipalli	10,240	192 0 0	10,240	..	10,240	56 0 0	248 0 0	1884	
	Naikeneri	6,092	504 0 0	6,400	307	6,093	123 0 0	627 0 0	1884	
	Chargul	..	..	19,200	..	19,200	12 0 0	12 0 0	1888	
	Peddinayandrug	..	..	12,800	..	12,800	12 0 0	12 0 0	1888	
	Gudiyátam Range.									
	Ambúr droog	5,760	67 0 0	5,760	..	5,760	75 0 0	142 0 0	1880	
	Arcot Range.									
	Punganúr	3,630	1,370 0 0	3,630	9	3,621	189 9 9	1,559 0 0	1884	
	Javadi Hill Range.									
	Putrakad block	19,200	751 0 0	19,200	..	19,200	45 0 0	796 0 0	1881	Transferred from General Protection.
	Puttur do.	12,800	375 0 0	12,800	..	12,800	45 0 0	420 0 0	1879	
	Virappanur do.	64,000	..	64,000	..	64,000	45 0 0	45 0 0	1886	
	Malayalam do.	12,800	35 0 0	12,800	200	12,600	18 0 0	53 0 0	1887	
	Wálajápet Range.									
	Ammanur	203	3 0 0	203	..	203	..	3 0 0	1880	
	Bansvaram	1,051	53 0 0	1,051	..	1,051	..	53 0 0	1880	
	Total ..	265,368	13,434 0 0	326,405	2,520	323,885	2,261 0 0	15,695 0 0		
	General Protection.									
	Pólúr Range.									
	Kapalúr	1,267	..	1,267	..	1,267	..	..	1884	
	Kilúr	3,537	..	3,537	..	3,537	..	..	1884	
	Alliyamangalam	10,062	..	10,062	3	10,059	..	..	1884	
	Vellore Range.									
	Amerdi plantation	25	..	25	..	25	..	..	1884	
	Ambúr tope	5	..	5	..	5	..	..	1884	
	Chandragiri Range.									
	Gazerlamandiyam plantation	250	..	250	..	250	..	..	1884	
	Tirupati Hill block	..	..	16,000	..	16,000	..	..	1888	

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	*Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS A. P.	RS. A. P.		
	Gudiyátam Range.									
	Vikramasi	161	17 0 0	161	..	161	..	17 0 0	1882	
	Tiruvallam plantation	435	..	435	..	435	..	..	1884	
	Virinjipuram do.	260	..	260	..	260	..	..	1884	
	Amundi do.	160	..	160	..	160	..	..	1884	
	Cheynur tope	130	..	130	..	130	..	..	1884	
	Tandrayagunta tope	2	..	2	..	2	..	..	1884	
	Palmanér Range.									
	Palmanér tope	2	..	2	..	2	..	..	1884	
	Nagamangalam	31	..	31	..	31	..	..	1884	
	Piduguvaripalle	20	..	20	..	20	..	..	1884	
	Vengatagirikóta	4	..	4	..	4	..	..	1884	
	Baireddipalle tope	4	..	4	..	4	..	..	1884	
	Arcot Range.									
	Kilminnel plantation	150	..	150	..	150	..	..	1884	
	Satúr	1,048	..	1,048	..	1,048	..	..	1884	
North Arcot—*cont.*	Sennaleri	1,675	..	1,675	..	1,675	..	..	1884	
	Enadivadi	1,567	..	1,567	..	1,567	..	..	1884	
	Tandayappentangal	1,112	..	1,112	..	1,112	..	..	1884	
	Sholavaram	1,232	..	1,232	..	1,232	..	..	1884	
	Wandiwash Range.									
	Pannur	940	..	940	..	940	..	..	1880	
	Venkundram	1,288	..	1,288	..	1,288	..	..	1880	
	Badur	873	..	873	..	873	..	..	1880	
	Nambedu	720	..	720	..	720	..	..	1880	
	Kodiyalam	125	..	125	..	125	..	..	1880	
	Nedungal	3,645	..	3,645	..	3,645	..	..	1883	
	Vishamangalam	1,148	..	1,148	..	1,148	..	..	1883	
	Nedungunam	1,797	..	1,797	..	1,797	..	..	1883	
	Bramhakateri	635	..	635	..	635	..	..	1883	
	Wdlajápet Range.									
	Gúdalúr	535	..	535	..	535	..	..	1880	
	Kolatúr	1,779	..	1,779	..	1,779	..	..	1884	
	Urayur or Anantapuram	540	..	540	..	540	..	..	1880	
	Ammur	3,520	..	6,020	..	6,020	..	..	1884	
	Minnel	1,378	..	1,378	..	1,378	..	..	1884	

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Wálajápet Range—cont.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
North Arcot—*cont.*	Vanavedu plantation	30	..	30	..	30	..	..	1884	
	Arkónam tope	37	..	37	..	37	..	..	1884	
	Arkónam Sub-Magistrate's compound	5	..	5	..	5	..	..	1884	
	Arkónam Head Assistant Collector's compound	4	..	4	..	4	..	..	1884	
	Total ..	42,138	17 0 0	60,638	3	60,635	..	17 0 0	1884	
	Total of the District ..	307,506	13,451 0 0	387,043	2,523	384,520	2,261 0 0	15,712 0 0		
	Tiruvannámalai Range.									
South Arcot ..	Annamalai reserved forest	1,738	..	1,760	150	1,610	69 0 0	..	1878	
	Kavuttimalai	5,825	..	6,000	3	5,997	179 0 0	..	1878	
	Tenmalai	20,000	..	20,000	380	19,620	9 0 0	..	1877	
	Mudinai reserved forest	4,000	..	..	..	..	112 0 0	..	1883	
	Valasamalai	7,000	..	7,000	..	7,000	..	..	1883-84	
	Damarakadu	8,000	..	..	..	..	20 0 0	..	1884	
	Chinnasamudram	6,000	..	..	..	..	29 0 0	..	1878	
	Perungolaturswamimalai reserved forest, including 2,000 acres in Kallakurchi taluk	8,700	..	11,000	..	11,000	..	..		
	Pelamaradur	..	..	8,000	..	8,000	..	..	1889	
	Nallapattu	..	..	7,000	..	7,000	..	..	1889	
	Kallakúrchi Range.									
	Tagarai, Lutchimipuram Kalroyen slopes	15,000	..	15,000	..	15,000	234 0 0	..	1889	
	Parigam Kambattumalai	1,000	..	..	..	..	..	..	1885-86	
	Total ..	76,763	4,423 0 0	75,760	533	75,227	652 0 0	5,075 0 0		
	Special Protection.									
	Salem Range.									
Salem	Vadugampatti block, No. I	1,976	1,620 0 0	1,976	..	1,976	246 0 0	1,866 0 0	1881	Renewed tracing, 8 miles.
	Morur do. „ II	799	812 0 0	799	..	799	61 0 0	873 0 0	1881	Do. do. 5½ „
	Mallapuram do. „ III	587	825 0 0	587	..	587	128 0 0	953 0 0	1881	Do. do. 5 „

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
		ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
	Salem Range—cont.									
	Ammaneri block, No. VIII	252	295 0 0	252	..	252	72 0 0	367 0 0	1882	Renewed tracing, 3½ mls.
	Pillapallikombai block, No. VII ..	981	522 0 0	981	..	981	96 0 0	618 0 0	1882	Do. do. 6 ,,
	Kariyappakombai do. ,, VI ..	531	364 0 0	531	..	531	110 0 0	474 0 0	1182	Do. do. 4 ,,
	Kangeri block, No. XII	1,929	506 0 0	1,929	..	1,929	143 0 0	649 0 0	1883	Do. do. 9½ ,,
	Pannikaradu block, No. XIV	2,645	1,244 0 0	2,645	..	2,645	145 0 0	1,389 0 0	1883	Do. do. 10½ ,,
	Karuvattuparai block, No. XV ..	837	760 0 0	837	..	837	126 0 0	886 0 0	1884	Do. do. 6½ ,,
	Putting out fire in Kurumbapatti reserve	..	..	..	..	..	2 0 0	2 0 0	..	
	Uttankarai Range.									
	Uttankarai block, No. IX	469	494 0 0	469	..	469	116 0 0	610 0 0	1881	Fire traced first, 1½ ,, Renewed tracing, 1½ ,,
	Singarapet do. ,, X	2,624	1,546 0 0	2,624	..	2,624	193 0 0	1,739 0 0	1881	Do. do. 12 ,,
	Harúr block, No. XI	1,176	833 0 0	1,176	..	1,176	150 0 0	983 0 0	1882	Do. do. 8½ ,,
Salem—*cont.* ..	*Tirupatúr Range.*									
	Kotur block, No. XXI	1,213	179 0 0	1,213	..	1,213	67 0 0	246 0 0	1885	Renewed tracing, 5½ ,,
	Krishnagiri Range.									
	Burgur block, No. IV	220	308 0 0	220	..	220	62 0 0	370 0 0	1883	Do. do. 4 ,,
	Pudur do. ,, V	1,069	768 0 0	1,069	..	1,069	96 0 0	864 0 0	1883	Do. do. 6 ,,
	Tograpalle block, No. XIII	499	142 0 0	499	..	499	53 0 0	195 0 0	1884	Do. do. 4½ ,,
	Hosúr Range.									
	Melgiri block, No. XVI..	5,461	444 0 0	5,461	..	5,461	107 0 0	551 0 0	1885	Do. do. 13½ ,,
	Kanavoi Kottapalle block, No. XVII..	742	151 0 0	742	..	742	30 0 0	181 0 0	1885	Do. do. 4 ,,
	Gulhatti block, No. XVIII	3,248	318 0 0	3,248	..	3,248	88 0 0	406 0 0	1885	Do. do. 11 ,,
	Munchi do. ,, XIX	3,305	345 0 0	3,305	..	3,305	65 0 0	410 0 0	1885	Do. do. 10 ,,
	Kanavanagasamudram block, No. XX	416	161 0 0	416	..	416	26 0 0	187 0 0	1885	Do. do. 4 ,,
	Total of the District ..	30,979	12,637 0 0	30,979	..	30,979	2,182 0 0	14,819 0 0		

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Musiri.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
Trichinopoly ..	Sengattupatti	3,000	126 0 0	3,000	..	3,000	..	126 0 0		
	Manmalai	3,000	111 0 0	3,000	..	3,000	..	111 0 0	1885-86	
	Kanapadi, T.	12,000	49 0 0	12,000	110	11,890	..	49 0 0	1887-88	
	Kampankadu	2,000	34 0 0	1,500	..	1,500	..	34 0 0	1887-88	
	Melúr	3,000	168 0 0	3,000	..	3,000	..	168 0 0	1885-86	
	Kanapadi, V.	10,000	76 0 0	10,000	..	10,000	..	76 0 0	1887-88	
	Palamalai	..	..	10,000	..	10,000	60 0 0	60 0 0	1888-89	
	Perambalúr.									
	Manalodai	4,000	40 0 0	..	..	..	8 0 0	48 0 0	1885-86	
	Salamatti	6,950	1,045 0 0	7,000	..	7,000	142 0 0	1,187 0 0	1885-86	
	Valaiyur	..	..	..	..	..	4 0 0	4 0 0	1888-89	
	Total of the District ..	43,950	1,649 0 0	49,500	110	49,390	214 0 0	1,863 0 0		
Tanjore	.....	*Nil.*								
	Kollegál.									
North Coimbatore.	I. Jadatallahulla	361	260 0 0	361	..	361	50 0 0	310 0 0	1884-85	
	II. Udayárpálaiyam	297	223 0 0	297	..	297	74 0 0	297 0 0	1884-85	
	III. Bailúr	1,186	451 0 0	1,186	..	1,186	57 0 0	508 0 0	1879-80	
	Satyamangalam.									
	IV. Gairmalai	520	43 0 0	..	..	..	..	43 0 0	1885-86	
	Total of the District ..	2,364	977 0 0	1,844	..	1,844	181 0 0	1,158 0 0		
South Coimbatore	No. I. Tunakadavu Range	3,408	1,913 0 0	24,000	350	23,650	577 0 0	2,490 0 0	1882-83	The expenditure incurred in No. II was for the purpose of protecting a block in No. I which adjoins.
	,, II. Pollachi do.	..	..	..	..	..	82 0 0	82 0 0	1888-89	
	,, III. Punachi do.	3,140	1,264 0 0	3,140	..	3,140	201 0 0	1,465 0 0	1882-83	
	,, IV. Udamalpet do.	485	280 0 0	485	..	485	49 0 0	329 0 0	1883-84	
	,, VII. Bolampatti do.	6,400	966 0 0	16,557	..	16,557	359 0 0	1,325 0 0	1884-85	
	,, VIII. Sholakarai do.	3,000	1,399 0 0	3,000	..	3,000	181 0 0	1,580 0 0	1883-84	
	Total of the District ..	16,433	5,822 0 0	47,182	350	46,832	1,449 0 0	7,271 0 0		

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Special Protection.									
	Reserved Forests.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.		
	No I. Uttamapalaiyam Range.									
Madura	Vannatiparai	27,473	836 0 0	27,481	..	27,481	524 0 0	1,360 0 0	1884-85	
	Suranganar	3,616		3,616	50	3,566	113 0 0		1885-86	
	Melagudalur	1,280	744 0 0	1,280	..	1,280	..	1,179 0 0	1885-86	
	Pandaratorai	300		300	..	300	..		1886-87	
	Machakal	2,560		2,560	250	2,310	322 0 0		1886-87	
	No. II. Kodaikánal Range.									
	Pambar	4,455	2,925 0 0	4,755	10	4,745	490 0 0	3,415 0 0	1883-84	
	Sengalvarai Ar	5,009	406 0 0	5,209	15	5,194	195 0 0	601 0 0	1885-86	
	Pumbarai and Vilapati valley	13,562	1,121 0 0	13,587	..	13,587	215 0 0	1,336 0 0	1885-86	
	Kudirai Ar and Kukkal	19,704	386 0 0	19,704	..	19,704	303 0 0	694 0 0	1886-87	
	Oliyanutu Oddai	..	..	3,200	..	3,200	20 0 0	20 0 0	1888-89	
	Perumalmalai	7,700	1,628 0 0	12,800	..	12,800	514 0 0	2,142 0 0	1883-84	Transferred from Reserved lands.
	Amburuvi	3,840	36 0 0	3,840	..	3,840	14 0 0	50 0 0	1886-87	Transferred from General Protection.
	No. III. Dindigul Range.									
	Sirumalai	25,509	1,315 0 0	25,529	240	25,289	583 0 0	1,898 0 0	1885-86	
	Mudumalai	6,086	423 0 0	6,086	..	6,086	212 0 0	635 0 0	1884-85	
	No. V. Alagar Hill.									
	Alagarmalai	13,036	6,317 0 0	17,510	116	17,394	549 0 0	6,866 0 0	1882-83	
	Reserved Lands.									
	No. II. Kodaikánal Range.									
	Mudugamalai Fuel and Fodder reserve.	3,227	806 0 0	3,227	..	3,227	94 0 0	900 0 0	1884-85	
	Arankanal	2,410	549 0 0	2,560	..	2,560	..	549 0 0	1883-84	
	Kallar	9,600	516 0 0	9,600	..	9,600	348 0 0	864 0 0	1885-86	
	No. III. Dindigul Range.									
	Karandamalais	22,400	33 0 0	22,400	..	22,400	..	33 0 0	1887-88	
	Panjantangi	3,200	42 0 0	3,200	..	3,200	..	42 0 0	1887-88	

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	IV. Mettupatti Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
Madura—*cont* ..	Waggatumalai Fuel and Fodder reserve	4,200	497 0 0	4,200	..	4,200	229 0 0	726 0 0	1884-85	
	Kachakatti Do. do.	1,694	30 0 0	1,694	..	1,694	..	30 0 0	1884-85	
	General Protection.									
	No. II. Kodaikánal Range.									
	Kodaikánal scattered plantation ..	3	12 0 0	3	..	3	..	12 0 0	1883-84	
	Do. Acacia do.	5	7 0 0	5	..	5	..	7 0 0	1883-84	
	Do. Pumbarai do.	6	3 0 0	6	..	6	2 0 0	5 0 0	1883-84	
	Parappa	42	22 0 0	42	..	42	18 0 0	40 0 0	1884-85	
	Gunden shola	54	14 0 0	54	..	54	15 0 0	29 0 0	1886-87	
	Total of the District ..	180,971	18,668 0 0	194,448	681	193,767	4,765 0 0	23,433 0 0		
	Special Protection.									
	Southern Range.									
	Ambásamudram Taluk—									
	(i) Block between Surveyar and Kariyar rivers, Pápanásam hills.	9,077	2,664 0 0	10,477	..	10,477	506 0 0	3,170 0 0	1884-85	
	(ii) Block between Surveyar, Kurampandi Teri, and Mutri Mottai.	900	695 0 0	1,200	..	1,200	402 0 0	1,097 0 0	1885-86	
	(iii) Alwarkurchi block	7,690	821 0 0	7,690	..	7,690	501 0 0	1,322 0 0	1886-87	
	(iv) Surveyar-Kariyar extension to the foot of the hills.	1,920	327 0 0	1,920	..	1,920	228 0 0	555 0 0	1887-88	
Tinnevelly ..	Nanguneri Taluk—									
	(v) Block of forests in the Kalakad hills.	8,320	1,416 0 0	8,320	500	7,820	243 0 0	1,659 0 0	1885-86	
	(vi) Do. do. ..	12,060	944 0 0	..	..	..	496 0 0	1,440 0 0	1886-87	
	Central Range.									
	Tenkási Taluk—									
	(i) Kuttálam block	5,120	262 0 0	5,120	..	5,120	422 0 0	684 0 0	1887-88	
	(ii) Kodiyanallúr block	2,560	157 0 0	2,560	..	2,560	216 0 0	373 0 0	1887-88	

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures	Area actually protected.	Amount expended.			
	Central Range—cont.	ACS.	RS A P.	ACS.	ACS.	ACS.	RS. A. P	RS. A. P.		
Tinnevelly—*cont.*	Tenkási Taluk—*cont.*									
	(iii) Boundary between Chokampatti and Government forests.	3 miles.	145 0 0	..	..	..	..	145 0 0	1885-86	No cost is debited under A VIII (*e*) during the year, on account of these boundary lines, it having been debited to VIII (*a*), as their primary object is to distinguish the boundary However they serve as fire lines at the same time.
	(iv) Boundary between Viranankulam and Government forests.	10 miles.	310 0 0	..	..	..	..	310 0 0	1885-86	
	Northern Range.									
	Sankaranainárkoil Taluk—									
	(i) Boundary between Tirumalanaickan Pudukudi and Government forests.	3 miles.	30 0 0	..	..	..	..	30 0 0	1885-86	
	(ii) Puliangudi and Chinthamony block.	..	..	37,292	..	37,292	850 0 0	850 0 0	1888-89	
	General Protection.									
	Northern Range.									
	Srivilliputúr	..	..	..	..	..	15 0 0	15 0 0	1888-89	
	Central Range.									
	Tenkási	..	..	..	..	..	11 0 0	11 0 0	1888-89	
	Southern Range.									
	Ambásamudram	..	..	..	..	..	1 0 0	1 0 0	1888-89	
	Nánguneri	..	..	..	..	..	25 0 0	25 0 0	1888-89	
	Total of the District ..	47,647 Mls. 16	7,771 0 0	74,579	500	74,079	3,916 0 0	11,687 0 0		
North Malabar ..	Begúr	13,963	3,109 0 0	15,366	10,244	5,122	893 0 0	4,002 0 0	1882-83	
	Kurchiyat	17,754	174 0 0	18,054	18,054	..	317 0 0	491 0 0	1887-88	
	Total of the District ..	31,717	3,283 0 0	33,420	28,298	5,122	1,210 0 0	4,493 0 0		

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.		Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.				
	Special Protection.	Acs.	Rs. A. P.	Acs.	Acs.	Acs.	Rs. A. P.	Rs. A. P.			
	Nilambúr.										
South Malabar ..	Karimpoya Reserve	3,955	493 0 0	3,955	..	3,955	249 0 0	742 0 0		1884-85	
	Amarampalaiyam Reserve	468	286 0 0	468	60	408	91 0 0	377 0 0		1860-61	
	Chatambarai do.	700	205 0 0	700	..	700	118 0 0	323 0 0		1872-73	
	Nellikutta do.	1,824	527 0 0	1,824	..	1,824	137 0 0	464 0 0		1883-84	
	Teak plantations do.	2,500	1,761 0 0	2,702	..	* 2,702	512 0 0	2,273 0 0		1842-43	* Inclusive of the new teak plantations and blocks II and III = 202 acres.
	Pálghat.										
	Wálayár Reserve	3,017	4,444 0 0	3,017	55	2,962	378 0 0	4,822 0 0		1873-74	
	Chenat Nair	15,203	845 0 0	15,203	50	15,153	402 0 0	1,247 0 0		1884-85	
	Total of the District ..	27,667	8,561 0 0	27,869	165	27,704	1,887 0 0	10,448 0 0			
	Special Protection.										
	Koondapoor Range.										
South Canara ..	Sabladi	208	86 0 0	208	..	208	38 0 0	124 0 0		1884-85	
	Sarpanamanekadu and Goligundi guddi reserved lands.	50	46 0 0	150	..	150	37 0 0	83 0 0		1886-87 and 1887-88	
	Udipi Range.										
	Pillarkan	320	81 0 0	320	..	320	27 0 0	108 0 0		1883-84	
	Chinkramale	2,558	542 0 0	2,560	2	2,558	91 0 0	633 0 0		1885-86 and 1886-87.	
	Manajikadu	420	221 0 0	423	..	423	129 0 0	350 0 0		1886-87	
	Tenkahola	2,068	324 0 0	2,039	..	2,039	58 0 0	382 0 0		1886-87	
	Mangalore Range.										
	Chembugudde	75	19 0 0	75	..	75	5 0 0	24 0 0		1884-85	
	Kuttiyar	25	12 0 0	25	..	25	3 0 0	15 0 0		1884-85	
	Poitagi Kayarpalle	96	22 0 0	96	..	96	7 0 0	29 0 0		1885-86	
	Uppinangadi Range.										
	Darmastalamandaji reserve	2,460	133 0 0	9,600	4	9,596	327 0 0	460 0 0		1887-88	2,460 acres.
										1888-89	7,140 do.

Area of Forest Tracts protected from fire during 1888-89—*cont.*

District.	Forest Tract.	Up to 31st March 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Area actually protected.	Amount expended.			
	Kásaragód Range.	ACS.	RS. A. P.	ACS.	ACS.	ACS.	RS. A. P.	RS. A. P.		
South Canara—*cont.*	Parappa	50	133 0 0	52	..	52	14 0 0	147 0 0	1885-86	
	Total of the District ..	8,330	1,619 0 0	15,548	6	15,542	736 0 0	2,355 0 0		
	Grand Total ..	790,001 Mls. 16	81,027 0 0	961,468	33,172	928,296	20,053 0 0	101,080 0 0		
	ABSTRACT.									
Chingleput	....	15,674	2,166 0 0	23,296	6	23,290	600 0 0	2,766 0 0		
North Arcot ..	....	307,506	13,451 0 0	387,043	2,523	384,520	2,261 0 0	15,712 0 0		
South Arcot ..	....	76,763	4,423 0 0	75,760	533	75,227	652 0 0	5,075 0 0		
Salem	....	30,979	12,637 0 0	30,979	..	30,979	2,182 0 0	14,819 0 0		
Trichinopoly ..	....	43,950	1,649 0 0	49,500	110	49,390	214 0 0	1,863 0 0		
Tanjore	....	..	..	..	..	..	..	..		
North Coimbatore ..	....	2,364	977 0 0	1,844	..	1,844	181 0 0	1,158 0 0		
South Coimbatore ..	....	16,433	5,822 0 0	47,182	350	46,832	1,449 0 0	7,271 0 0		
Madura	....	180,971	18,668 0 0	194,448	681	193,767	4,765 0 0	23,433 0 0		
Tinnevelly	....	47,647 16 miles.	7,771 0 0	74,579	500	74,079	3,916 0 0	11,687 0 0		
North Malabar ..	....	31,717	3,283 0 0	33,420	28,298	5,122	1,210 0 0	4,493 0 0		
South Malabar ..	....	27,667	8,561 0 0	27,869	165	27,704	1,887 0 0	10,448 0 0		
South Canara ..	....	8,330	1,619 0 0	15,548	6	15,542	736 0 0	2,355 0 0		
	Total ..	790,001 Mls. 16	81,027 0 0	961,468	33,172	928,296	20,053 0 0	1,01,080 0 0		
							Charged in previous years	60,315 0 0		
							Do. do. 1887-88	20,712 0 0		
							Do. do. 1888-89	20,053 0 0		
							Total ..	1,01,080 0 0		

Annual Form No. 63.

Forest Department, Madras, Southern Circle.

Prosecutions for Breaches of Forest Rules during 1888-89.

District.	Cases pending from 1887-88.	New cases of the year.					Total Cases.	Disposed of during the year.									Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Compounded.		Withdrawn.		Total.	
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Chingleput	1	2	6	..	1	9	10	6	16	4	25	..	..	..	..	10	41	..
North Arcot	4	5	100	60	14	179	183	42	91	39	126	97	255	..	..	178	472	5
South Arcot	36	2	73	23	25	123	159	38	118	11	42	60	193	..	..	109	353	50
Salem	32	6	379	191	34	610	642	244	672	127	608	158	513	53	204	582	1,997	60
Trichinopoly	34	3	537	16	125	681	715	206	248	42	62	426	950	..	..	674	1,260	41
Tanjore	20	..	72	..	..	72	92	44	61	6	17	33	82	..	..	83	160	9
North Coimbatore	7	1	13	4	3	21	28	17	29	8	49	2	5	1	4	28	87	..
South Coimbatore	11	1	36	31	6	74	85	21	73	7	32	32	134	22	18	82	257	3
Madura—Under Forest Act ..	7	4	48	..	5	57	64	22	65	18	69	11	11	..	..	51	145	13
Tinnevelly .. Under Forest Act ..	..	3	29	6	3	41	41	23	57	15	42	3	11	..	..	41	110	..
Tinnevelly .. Under Penal Code ..	6	..	5	2	43	50	56	46	131	5	52	..	..	..	..	51	183	5
North Malabar	1	3	28	10	13	54	55	26	86	7	17	20	27	..	..	53	130	2
South Malabar. Under Forest Act. ..	..	2	10	..	7	25	26	17	36	8	13	1	3	..	..	26	52	..
South Malabar. Under Penal Code ..	1	..	4	..	2													
South Canara	13	1	160	..	44	205	218	108	144	37	81	54	85	..	..	199	310	19
Total ..	173	33	1,500	343	325	2,201	2,374	860	1,827	334	1,235	897	2,269	76	226	2,167	5,557	207

ANNUAL FORM No. 64.

Forest Department, Madras, Southern Circle.

Summary of Revenue of the different districts, 1888-89.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
RECEIPTS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government agency—															
(a) Timber	..	3	4,560	1,369	740	95	..	..	39,883	4,404	3,538	22,400	42,642	8,163	1,27,847
(b) Firewood and charcoal	..	4,845	3,941	6,169	397	15,321	4	..	40	7,027	3,716	..	61	1,186	42,707
(c) Bamboos	..	..	..	1	54	40	..	..	..	..	423	..	1,131	..	1,649
(d) Sandalwood ..	..	..	10,145	81	338	..	..	..	..	..	..	..	..	..	10,564
(e) Grass and other minor produce ..	..	..	..	143	..	195	..	..	5,557	43	793	355	324	58,067	65,477
II. Timber and other produce removed from the forests by consumers or purchasers—															
(a) Timber	..	6,719	19,799	7,901	21,305	7,290	361	6,270	6,030	21,942	5,010	3,671	2,957	3,379	1,12,634
(b) Firewood and charcoal	..	11,779	41,847	21,244	24,177	6,939	4,640	6,699	13,897	7,334	29,355	..	3,164	5,289	1,76,364
(c) Bamboos	..	390	19,441	2,136	29,076	4,695	234	11,264	7,445	3,225	510	296	928	919	80,559
(d) Grazing and fodder grass	..	2,695	3,318	1,930	5,257	5,893	751	23,336	6,341	2,462	312	..	101	..	52,396
(e) Other minor produce.	..	2,314	17,633	23,670	63,018	7,485	5,359	27,194	6,217	34,047	18,099	2,528	32	881	2,08,477
III. Confiscated drift and waifwood	..	42	323	265	783	155	24	64	103	1,022	308	..	281	363	3,733
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Miscellaneous—															
(a) Fines and forfeitures	..	20	13	11	104	..	8	..	44	17	199	..	25	..	441
(b) Refunds	875	20	75	9	1,525	..	..	25	278	618	703	129	478	3	4,738
(c) Other sources ..	..	64	1,077	645	1,620	1,634	473	47	1,496	237	356	1,063	973	816	10,500
Total, Receipts ..	875	28,891	1,22,172	65,574	1,48,394	49,742	11,854	74,899	87,331	82,378	63,372	30,442	53,097	79,065	8,98,086

MADRAS,
The 11th June 1889.

C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 64.

Forest Department, Madras, Southern Circle.

Summary of Expenditure of the different districts, 1888-89.

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
A.—*Conservancy and Works.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government agency—															
(*a*) Timber	..	..	3,203	794	1,097	..	..	..	16,774	3,015	4,269	117	8,500	7,062	44,831
(*b*) Firewood and charcoal ..	..	69	1,745	1,878	108	7,204	..	..	225	2,691	255	..	..	994	15,169
(*c*) Bamboos	..	..	..	..	47	2	..	..	..	..	149	..	..	..	198
(*d*) Sandalwood	..	..	930	18	463	..	..	..	..	..	..	..	..	..	1,411
(*e*) Grass and other minor produce	..	..	66	79	..	86	..	..	3,694	1	972	184	222	29,458	34,762
II. Timber and other produce removed from the forests by consumers or purchasers	394	1,089	5,840	2,875	11,182	2,508	647	6,977	3,258	4,165	3,894	..	10	3,755	46,594
III. Confiscated drift and waifwood ..	..	1	10	21	36	2	..	1	2	105	13	2	3	5	201
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government ..	..	..	..	..	10	..	..	..	2,500	..	..	..	889	..	3,399
VI. Live-stock, stores, tools and plant—															
(*a*) Purchase of cattle	..	..	..	..	..	104	..	..	..	..	..	154	1,451	..	1,709
(*b*) Feed and keep of cattle ..	..	..	..	16	..	888	..	..	1,163	686	..	1,514	3,718	..	7,985
(*c*) Stores, tools and plant ..	7	86	11,076	968	84	421	20	180	51,338	237	345	75	278	75	65,190
VII. Communications and buildings—															
(*a*) Roads and bridges ..	..	300	2,094	273	..	38	..	52	6,304	3,178	3,221	338	547	..	16,345
(*b*) Buildings	..	337	975	598	659	308	2	972	377	1,769	2,645	2,119	7,808	130	18,699
(*c*) Other works	..	1	..	314	..	..	..	..	146	..	2	265	76	..	804
VIII. Demarcation, improvement and extension of forests—															
(*a*) Demarcation	..	1,312	1,479	513	6,282	437	28	1,615	54	971	1,913	340	258	996	16,191
(*b*) Compensation for land and rights	..	23	218	531	80	..	..	..	..	342	217	..	..	..	1,411
(*c*) Surveys and working plans.	41,036	24	13	7	755	294	310	..	478	500	725	25	23	1,008	45,198
(*d*) Plantations	..	1,203	6,385	2,137	1,583	4,040	1,777	1,049	64	3,244	763	719	8,759	1,091	32,814
(*e*) Protection from fire ..	..	600	2,261	652	2,182	214	..	181	1,449	4,765	3,916	1,210	1,887	736	20,053
(*f*) Other works	..	1,597	5,476	4,501	5,466	3,601	1,812	1,713	648	258	4,111	59	715	321	30,278
IX. Miscellaneous—															
(*a*) Refunds	1	99	1,163	673	479	128	3	39	19	165	16	..	..	213	2,998
(*b*) Law charges	..	..	60	1	2	..	6	..	7	..	19	1,372	60	53	1,580
(*c*) Other charges	21	15	28	19	68	13	3	6	26	1	122	22	47	58	449
Total, A.—Conservancy and Works ..	41,459	6,756	43,015	16,868	30,583	20,288	4,608	12,785	88,526	26,093	27,567	8,515	35,251	45,955	4,08,269

Summary of Expenditure of the different districts, 1888-89—*cont.*

Budget heads.	Direction.	Chingleput.	North Arcot.	South Arcot.	Salem.	Trichinopoly.	Tanjore.	North Coimbatore.	South Coimbatore.	Madura.	Tinnevelly.	North Malabar.	South Malabar.	South Canara.	Total.
B.—*Establishments.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Brought forward—Total, A.—Conservancy and Works ..	41,459	6,756	43,015	16,868	30,583	20,288	4,608	12,785	88,526	26,093	27,567	8,515	35,251	45,955	408,269
I. Salaries—															
(*a*) Conservators ..	14,822	..	..	..	..	..	..	..	..	..	..	..	..	..	14,822
(*b*) Superior officers ..	18,538	3,000	6,600	8,800	10,016	2,356	403	9,600	8,226	8,607	6,566	9,410	7,150	5,400	1,04,672
(*c*) Subordinate forest and depôt establishments	3,273	3,292	10,775	10,776	12,619	6,297	1,326	5,809	9,056	7,448	6,462	4,578	4,461	5,304	91,476
(*d*) Office establishments	18,441	1,236	2,574	2,598	3,031	1,798	578	2,725	2,902	2,152	2,171	2,622	1,604	2,355	46,787
(*e*) Deputation and special allowances.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II Travelling allowances—															
(*a*) Conservators ..	3,159	..	..	..	..	..	..	..	..	..	..	..	..	..	3,159
(*b*) Superior officers ..	4,351	1,408	1,878	1,350	1,855	576	..	1,800	1,648	2,040	1,790	1,800	1,396	1,440	23,332
(*c*) Subordinate forest and depôt establishments ..	1,393	781	3,152	2,708	3,755	2,235	300	1,978	2,812	1,976	1,772	1,319	1,460	1,576	27,217
(*d*) Office establishments	3,079	112	280	212	204	120	43	433	256	301	259	160	152	230	5,841
III. Contingencies—															
(*a*) Stationery	64	..	..	..	..	..	..	1	..	..	..	..	..	..	65
(*b*) Carriage of tents and records	829	53	118	61	257	60	10	119	47	111	124	4	3	333	2,129
(*c*) Rents, rates and taxes	705	..	6	364	58	263	..	47	..	13	2	..	..	1	1,459
(*d*) Pay of police guards.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(*e*) Official postage ..	1,022	186	412	679	985	361	121	441	251	506	445	176	138	645	6,368
(*f*) Sundries	1,264	161	470	902	694	173	36	455	865	415	524	343	103	131	6,536
Total, B.—Establishments ..	70,940	10,229	26,265	28,450	33,471	14,239	2,817	23,408	26,063	23,569	20,115	20,412	16,467	17,415	3,33,863
Grand Total of Expenditure ..	1,12,399	16,985	69,280	45,318	64,057	34,527	7,425	36,193	1,14,589	49,662	47,682	28,927	51,718	63,370	7,42,132

MADRAS,
The 11th June 1889.

C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 65.

Forest Department, Madras, Southern Circle.

Outstandings and Liabilities on account of Contractors and Disbursers for 1888-89.

District.	Department debtor.			Department creditor.			Balance due		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Conservator, Southern Circle	..	2,246 3 8	2,246 3 8	180 7 9	2,150 3 7	2,330 11 4	84 7 8	..	
Three-fifths of Examiner's office	..	516 0 3	516 0 3	36 3 4	486 13 9	523 1 1	7 0 10	..	
Forest Settlement-officer, Chingleput, &c. ..	..	416 1 4	416 1 4	20 0 0	433 1 7	453 1 7	37 0 3	..	
Forest Settlement-officer, Salem, &c.	..	....	....	....	....	....	....	..	
Forest School, Dehra Dun	..	371 0 0	371 0 0	37 0 0	420 0 0	457 0 0	86 0 0	..	
Chingleput	..	6,690 15 11	6,690 15 11	208 7 1	6,613 10 8	6,822 1 9	131 1 10	..	
North Arcot	..	40,013 2 6	46,013 2 6	152 10 2	39,898 3 7	40,050 13 9	37 11 3	..	
South do.	..	33,165 15 7	33,165 15 7	1,013 15 3	34,706 8 8	35,720 7 11	2,554 8 4	..	
Salem	..	49,666 13 1	49,666 13 1	735 7 7	49,723 13 4	50,459 4 11	792 7 10	..	
Trichinopoly	..	27,575 2 5	27,575 2 5	235 14 3	28,186 15 11	28,422 14 2	847 11 9	..	
Tanjore	..	6,230 2 3	6,230 2 3	37 0 9	6,208 9 4	6,245 10 1	15 7 10	..	
North Coimbatore	..	19,281 11 8	19,281 11 8	1,859 10 4	18,257 4 1	20,116 14 5	835 2 9	..	
South do.	..	33,590 3 9	33,590 3 9	1,072 15 7	33,480 13 5	34,553 13 0	963 9 3	..	
Madura	..	38,349 4 7	38,349 4 7	2,412 13 3	37,213 3 9	39,626 1 0	1,276 12 5	..	
Tinnevelly	..	40,028 10 3	40,028 10 3	3,140 14 4	39,541 3 11	42,682 2 3	2,653 8 0	..	
North Malabar	..	6,709 0 8	6,709 0 8	2,197 6 7	5,465 9 8	7,663 0 3	953 15 7	..	
South do.	..	20,794 1 3	20,794 1 3	5,857 6 10	15,833 9 8	21,691 0 6	896 15 3	..	
South Canara	..	47,929 13 1	47,929 13 1	5,648 7 9	51,620 7 9	57,268 15 6	9,339 2 5	..	
Total ..	..	3,73,574 6 3	3,73,574 6 3	24,846 12 10	3,70,240 4 8	3,95,087 1 6	21,512 11 3	..	

Madras,
The 11th June 1889.

C. G. Douglas,
Examiner of Forest Accounts.

ANNUAL FORM No. 66.

Forest Department, Madras, Southern Circle.

Revenue received and outstandings on account of Revenue during 1888-89.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other produce.	..	875 8 0	875 8 0	875 8 0	..
Chingleput ..		..	28,890 8 2	28,890 8 2	28,890 8 2	..
North Arcot ..		583 14 8	1,24,109 9 11	1,24,693 8 7	1,22,172 7 9	2,521 0 10
South do. ..		1,129 5 5	64,569 4 0	65,698 9 5	65,573 9 5	125 0 0
Salem		..	1,49,353 9 4	1,49,353 9 4	1,48,394 4 4	959 5 0
Trichinopoly ..		706 11 0	52,051 1 1	52,757 12 1	49,742 3 11	3,015 8 2
Tanjore		8 0 0	11,846 8 11	11,854 8 11	11,854 8 11	..
North Coimbatore.		1,066 1 5	76,582 13 5	77,648 14 10	74,898 11 5	2,750 3 6
South do.		3,011 5 1	87,094 1 8	90,105 6 9	87,330 10 8	2,774 12 5
Madura		2,573 5 3	81,344 3 7	83,917 8 10	82,378 0 11	1,539 7 11
Tinnevelly ..		440 14 8	64,671 0 11	65,112 5 7	63,372 6 1	1,739 15 1
North Malabar ..		..	31,832 0 5	31,832 0 5	30,441 0 5	1,391 0 0
South do. ..		479 0 4	53,094 2 5	53,573 2 9	53,096 10 9	476 8 0
South Canara ..		1 0 0	80,691 15 5	80,692 15 5	79,064 10 5	1,628 5 0
	Total ..	(a) 9,999 9 10	9,07,006 13 3	9,17,006 7 1	8,98,085 5 2	(b)18,921 1 11

MADRAS,
The 11th June 1889.

C. G. DOUGLAS,
Examiner of Forest Accounts.

	RS. A. P.	RS. A. P.
Under budget head I	1,917 12 5	6,482 2 8
,, ,, II	7,703 11 5	12,438 13 3
,, ,, V	378 2 0	0 2 0
Total ..	(a) 9,999 9 10	(b) 18,921 1 11

ANNUAL FORM No. 67.

Forest Department, Madras, Southern Circle.

Financial results of the year 1888-89.

District.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Direction	..	..	875	..	..	875	..
Chingleput	4,848	892	24,043	4,117	13,848	28,891	18,857
North Arcot	18,646	13,296	1,03,526	15,296	48,504	1,22,172	77,096
South Arcot	7,763	9,906	57,811	12,401	27,600	65,574	49,907
Salem	1,529	3,924	1,46,865	25,504	47,078	1,48,394	76,506
Trichinopoly	15,651	16,033	34,091	5,523	16,766	49,742	38,322
Tanjore	4	..	11,850	1,246	7,110	11,854	8,356
North Coimbatore ..	..	..	74,899	23,084	17,080	74,899	40,164
South Coimbatore ..	45,480	34,682	41,851	7,459	84,705	87,331	1,26,846
Madura	11,474	12,680	70,904	9,576	60,323	82,378	82,588
Tinnevelly	8,520	11,699	54,852	9,035	43,080	63,372	63,814
North Malabar	22,755	8,985	7,687	1,720	21,425	30,442	32,130
South Malabar	44,158	24,654	8,939	600	32,076	53,097	57,330
South Canara	67,416	57,210	11,649	6,249	6,757	79,065	70,216
Total ..	2,48,244	1,93,970	6,49,842	1,21,810	4,26,352	8,98,086	7,42,132

Annual Form No. 68.

Forest Department, Madras, Southern Circle.

Trees felled by Government Agency during the year 1888-89.

(Selection Fellings).

District.	Range, forest or working circle.	Description of trees.	Number of trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Number.	Total.	Balance at end of the year.	Remarks.
Chingleput ..	....	....	*Nil.*							
North Arcot ..	Chittur range ..	Casuarina trees	..	6	6	Transferred to Form No. 69 ..	6	6	..	
	Arcot do. ..	Do. posts	..	14	14		14	14	..	
		Total of district ..	..	20	20		20	20	..	
South Arcot ..	No. I Range, Tiruvannamalai, Chengam circle forest.	Vengai	..	41	41	Converted into logs and poles 41 and transferred to Form No. 69.	41	41	..	
	Checkadi	Do.	..	264	264	Do. 264 do. ..	264	264	..	
		Acha	..	1	1	Do. 2 do. ..	1	1	..	
	Chengam and Checkadi.	Miscellaneous trees	..	771	771	Do. 794 do. ..	771	771	..	
		Total of district ..	..	1,077	1,077		1,077	1,077	..	
Salem	Hosúr range ..	Teak	..	3	3	Transferred to Form No. 69 ..	3	3	..	
		Miscellaneous trees	..	478	478		478	478	..	
		Total of district ..	..	481	481		481	481	..	
Trichinopoly ..	Kulitala range ..	Casuarina trees	..	40	40	Transferred to Form No. 69 ..	40	40	..	
		Miscellaneous trees	..	5	5		5	5	..	
		Total of district ..	..	45	45		45	45	..	
Tanjore	....	....	*Nil.*							
North Coimbatore.	....	....	*Nil.*							

Trees felled by Government Agency during the year 1888-89—*cont.*

District.	Range, forest or working circle.	Description of trees.	Number of trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Number.	Total.	Balance at end of the year.	Remarks.
South Coimbatore	No. I. Range ..	Teak	..	295	295	Converted into logs 668 and transferred to Form No. 69.	295	295	..	
		Miscellaneous trees	..	649	649	Do. into 1,167 do. ..	649	649	..	
	No. II. do. ..	Teak	..	152	152	Do. into 152 do. ..	152	152	..	
		Rosewood	..	49	49	Do. into 49 do. ..	49	49	..	
	No. VII do. ..	Benteak	..	149	149	Do. into 201 do. ..	149	149	..	
		Rosewood	..	167	167	Do. into 250 do. ..	167	167	..	
		Vengai and Mal Vengai ..	..	84	84	Do. into 112 do. ..	84	84	..	
		Miscellaneous trees	..	10	10	Do. into 14 do. ..	10	10	..	
		Total of district ..	..	1,555	1,555		1,555	1,555	..	
Madura	No. I. Range ..	Teak	..	9	9	Transferred to Form No. 69.	9	9	..	
		Rosewood	..	40	40		40	40	..	
	No. II. do. ..	Vengai	..	36	36		36	36	..	
		Do.	..	79	79		79	79	..	
		Total of district ..	..	164	164		164	164	..	
Tinnevelly ..	Southern Range ..	Miscellaneous trees	1	131	132	Converted into 1,130 scantlings and transferred to Form No. 69.	131	131	1	
North Malabar ..	Begur	Benteak	..	2	2	Transferred to Form No. 69 ..	2	2	..	
South Malabar ..	Nilambúr Range ..	Blackwood	..	116	116	Transferred to Form No. 69 ..	116	116	..	
		Miscellaneous trees	..	226	226	Do. do. ..	226	226	..	
	Palghat Range ..	Blackwood	..	1	1	Do. do. ..	1	1	..	
		Vengai	..	1	1	Do. do. ..	1	1	..	
		Miscellaneous trees	2	140	142	Converted into 308 logs and do.	140	140	2	
		Total of district ..	2	484	486		484	484	2	

Trees felled by Government Agency during the year 1888-89—*cont.*

District.	Range, forest or working circle.	Description of trees.	Number of trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Number.	Total.	Balance at end of the year.	Remarks.
South Canara ..	Condapur range ..	Rosewood	2	..	2	Transferred to form No. 69 ..	1	2	..	
						Struck off	1			
		Miscellaneous trees	5	1	6	Transferred to form No. 69 ..	5	6	..	
						Struck off	1			
	Uppinangadi range..	Rosewood	5	14	19	Transferred to miscellaneous trees.	2	11	8	
						Transferred to form No. 69 ..	9			
		Vengai	..	1	1	Do. do.	1	1	..	
		Miscellaneous trees	73	* 463	536	Converted into 224 logs and transferred to form No. 69.	182	196	340	* Two added by transfer from rosewood.
						Do. 16 boats do. ..	14			
		Total of district ..	85	479	564		216	216	348	
		GRAND TOTAL.								
		Teak	..	610	610	Converted into 1,035 logs and transferred to form No. 69.	610	610	..	
		Vengai	..	506	506	Do. 534 logs do. ..	506	506	..	
		Rosewood	7	387	394	Converted into 466 logs and transferred to form No. 69	383	386	8	
						Otherwise disposed of	2			
						Struck off	1			
		Miscellaneous trees	81	2,935	3,016	Converted into 8,283 logs and 1,130 scantling.	2,658	2,673	343	
						Converted into 16 boats ..	14			
						Struck off	1			
		Total ..	88	4,438	4,526		4,175	4,175	351	

Annual Form No. 69.

Forest Department, Madras, Southern Circle.

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89.

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Chingleput.	Tiruvallúr ..	Junglewood ..	..	..	..	C. ft. 6	..	C. ft. 6	Sold	..	C. ft. 6	..	..
		Fuel and firewood stumps.	Tons. lb. 18 200	..	Tons. lb. 83 1,809	..	Tons. lb. 101 2,009	..	Do.	Tons. lb. 101 2,009	..	..	..
	Chingleput ..	Casuarina, &c., firewood.	..	..	1,207 1,561	..	1,207 1,561	..	Do.	1,207 1,561	..	..	..
North Arcot.	Chandragiri ..	Redwood roots and stumps.	..	..	Tons. lb. 359 0	..	Tons. lb. 359	..	To Mamandúr and Nagapatla depôts.	Tons lb. 359 0	..	..	..
	Gudiyátam ..	Casuarina wood and branch wood.	..	..	802 1,098	..	802 1,098	..	Sold to Messrs. Morrison and Sons.	775 1,120	..	..	..
									Sold to public ..	3 1,120			
									To Jail depôt ..	23 1,098			
		Charcoal	..	..	2 0	..	2 0	..	Sold to South Indian Railway.	2 0	..	..	..
	Vellore ..	Babul wood (firewood).	..	..	78 2,175	C. ft. and 7,811	78 2,175	C. ft. and 7,811	Do. do. ..	15 0	C. ft. and 7,811	..	..
									To Jail depôt ..	63 2,175	..		
	Arcot	Casuarina branch and dead wood.	..	..	21 0	..	21 0	..	Sold to South Indian Railway.	21	..	..	..
	Chittoor ..	Casuarina posts ..	..	..	No. 14	..	No. 14	..	Do. do. ..	No. 14	..	..	..
		Do. trees ..	..	..	,, 6	..	,, 6	..	Sold to public ..	,, 6	..	..	..
	Javdi ..	Sandalwood and roots.	..	..	Tons. lb. 15 1,404	..	Tons. lb. 15 1,404	..	To Vellore depôt ..	Tons. lb. 15 1,404	..	..	..
South Arcot.	I. Tiruvannámalai Range.	Vengai logs and poles	..	..	No. 459	C. ft. pts. 378 6	No. 459	C. ft. pts. 378 6	To Tiruvannámalai depôt.	No. 422	C. ft. pts. 275 6	..	..
									Sold	37	103 0		
		Miscellaneous timber	..	..	796	1,599 4	796	1,599 4	To Tiruvannámalai depôt.	317	523 3	No. 64	C. ft. pts. 147 11
									Sold	415	..		
		Honey	..	..	Tons. lb. 0 336	..	Tons. lb. 0 336	..	To Tiruvannámalai depôt.	Tons. lb. 0 336	928 2	..	..
		Wax	..	..	0 35	..	0 35	..	Do.	0 35	..	..	..
		Other minor produce.	..	..	0 640	..	0 640	..	Sold	0 640	..	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
South Arcot—*cont.*	II. Tindivanam Range.	Firewood	..	..	Tons. lb. 21 1,120	..	Tons. lb. 211,120	..	Sold	Tons. lb. 1 1,120	7 ..	..	..
									To Tindivanam depôt	20 0			
									Do. ..	0 20	..	..	..
		Honey	..	..	0 20	..	0 20	..	Sold	0 17½	..	..	..
		Wax	..	..	0 17½	..	0 17½	..		No.			
					No.		No.						
		Other minor produce.	..	..	14,700	..	14,700	..	Do.	14,700	..	..	..
	III. Villupuram Range.		Tons. lb.		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Babul firewood ..	1 0	..	747 1,312	..	748 1,312	..	Do.	746 1,659	..	1 1,893	..
		Bamboos	..	..	No. 2	..	No. 2	..	Do.	No. 2	..	..	..
					Tons. lb.		Tons. lb.			Tons. lb.			
		Honey	..	..	0 4	..	0 4	..	Do.	0 4	..	..	..
		Wax	..	..	3 polloms.	..	3 polloms.	..	Do.	3 polloms.	C. ft. pts.	No.	C. ft. pts.
			No.	C. ft. pts.	No.	C. ft. pts.	No.	C. ft pts.	Do.	No. 2,293	1,264 10		
		Casuarina timber poles.	51	480 7	2,377	1,354 6	2,428	1,835 1	Supplied to Jail depôt.	,, 73	156 6	61	412 3
									To Chidambaram depôt.	,, 1	1 6		
		Miscellaneous poles.	..	..	..	156 0	..	156 0	Sold	..	156 0	..	..
			Tons. lb.		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb	
	IV. Cuddalore Range.								Do.	282 1,624	..		
									Used by dept. ..	14 0	..	81 1,148	..
		Casuarina firewood..	171,895	..	369 1,213	..	387 868	..	Supplied to Jail depôt.	6 336	..		
									To Chidambaram depôt.	3 0	..		
		Kandan, &c., firewood.	24:2,038	..	8 0	..	249 2,038	..	Sold	8 0	..	*241 2,038	..
		Honey	..	..	0 12¾	..	0 12¾	..	To Cuddalore depôt ..	0 12¾	..	..	..
		Wax	0 1/16	..	0 1/16	..	0	..	Do. ..	0	..	..	..
		Other minor produce.	..	..	No. 14,625	..	No. 14,625	..	To Chidambaram depôt.	No. 14,625	..	..	..
					Tons. lb.		Tons. lb.			Tons. lb.			
	V Tirukoilûr Range.	Honey	..	..	0 16	..	0 16	..	Sold	0 16	..	..	..
	VI. Kallakurchi Range.	Do. ..	..	..	0 23	..	0 23	..	Do.	0 23	..	..	..
Salem.	Salem ..				No.		No.			No.			
		Engine fuel ..	..	..	11,560	..	11,560	..	To sale depôt	11,560	..	..	..
					Tons. lb.		Tons. lb.			Tons. lb.			
		Sandalwood ..	..	..	0 27	..	0 27	..	Sold	0 27	..	..	..
					No.		No.			No.			
	Námakal ..	Do. pieces ..	..	..	6	..	6	..	Do.	6	..	...	..

* Not in stock.

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Salem—*cont.*	Hosúr Range.	Teak	..	..	No. 3	C. ft. 9 0	No. 3	C. ft. 9 0	To sale depôt	No. 3	C. ft. 9 0	..	..
		Brushwood	..	..	..	8,217 0	..	8,217 0	To Hosur depôt ..	..	1,898 0	..	..
									Sold	..	6,319 0		
		Miscellaneous timber.	..	..	478	1,011 0	478	1,011 0	To sale depôt	478	1,011 0	..	..
		Bamboos	..	..	1,424	..	1,424	..	Do.	1,424	..	..	..
		Sandalwood billets, roots, chips and dust.	..	..	Tons. lb. 12 1,333	..	Tons. lb. 12 1,333	..	Do.	Tons. lb. 12 1,333	..	..	..
	Tirupatúr ..	Sandalwood pieces ..	..	..	No. 4	..	No. 4	..	Sold	No. 4	..	..	..
Trichinopoly.	Trichinopoly ..	Firewood	Tons. lb. 12 224	..	Tons. lb. 120 0	..	Tons. lb. 132 224	..	Sold	Tons. lb. 12 224	..	Tons. lb. 40 0	..
									To Central Jail ..	80 0	..		
		Miscellaneous timber.	..	..	No. 45	..	No. 45	..	Sold	No. 45	..	..	..
					Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Firewood	..	..	3,655 1,118	..	3,655 1,118	..	Do.	1,520 1,501	..	308 991	..
									Do. to South Indian Railway.	1,826 866	..		
	Kulitalai	Bamboos	..	..	No. Bdls. 222 and 21	..	No. Bdls. 222 and 21	..	Sold	No. Bdls. 222 and 21	..	..	..
		Minor produce ..	..	..	Tons. lb. 12 150	..	Tons. lb. 12 150	..	Do.	Tons. lb. 12 0	..	Tons. lb. 0 150	..
		Vembadam bark ..	Meas. 1,269½ = Mds. 1,269½	..	Mds. 9	..	1,278½	..	Do.	Mds. 59¼	..	..	..
									Otherwise disposed of.	1,219¼	..		
		Gall nuts	Meas. 800	..	Meas. 320	..	Meas. 1,120	..	Sold	Meas. 800	..	Meas. 320	
	Perambalúr ..	Do.	Meas. 752	..	Meas. 784	..	Meas. 1,536	..	Do.	Meas. 800	..	Meas. 736	
					Tons. lb.		Tons. lb.			Tons. lb.			
	Udayárpálaiyam.	Firewood	..	..	1,244 1,792	..	1,244 1,792	..	To Tiruvádi depôt ..	431 1,792	..	..	..
									To Kumbakónam ..	795 0	..		
									Sold to Tanjore Jail ..	18 0	..		
Tanjore.	Northern Range.	Firewood	Tons. 4	..	..	..	Tons. 4	..	Sold	Tons. 4	..	..	..
North Coimbatore.	Satyamangalam.	Sandalwood ..	..	..	Mds. lb. 5 17	..	Mds. lb. 5 17	..	To sale depôt	Mds. lb. 5 17	..	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet
			No.	C. ft.	No.	C. ft.	No.	C. ft.		No.	C. ft.	No.	C. ft.
South Coimbatore.	I. Tunacadavu Range.	Teak	261	13,631	668	30,194	947	45,363	To Vellarugu adivaram.	133	5,923	805	38,860
					— 12*	..			Used for bridge ..	9	560		
		Old logs found in the forest.	..	..	16	812							
		Transferred from Form 7.	..	..	14	726							
		Do. rafters ..	..	..	18	217	18	217	To Vellarugu	18	217	..	..
		Miscellaneous timber.	..	..	1,170	35,391	1,170	35,391	To Adivaram	32	853	1,138	34,538
			Mds. Vis.		Mds. Vis.		Mds. Vis.			Mds. Vis.		Mds. Vis.	
		Dammer, 1st and 2nd sort.	7 2	..	146 6	..	153 8	..	To Anaimalai depôt ..	116 3	..	37 5	..
		Wax	..	..	76 ¼	..	76 ¼	..	Do. ..	62 2½	..	13 4	..
									Wastage	0 1½	..		
		Mattipal	..	..	0 3¾	..	0 3¾	..	To Anaimalai depôt ..	0 3¾	..	..	..
			Meas.		Meas.		Meas.			Meas.		Meas.	
		Cardamoms	¾	..	1,301⅜	..	1,302⅛	..	Do. ..	1,288⅜	..	13¾	..
		Honey	..	..	67½	..	67½	..	Do. ..	67½	..	..	..
			No.		No.		No.			No.			
		Canes, 1st to 4th sort.	175	..	35,735	..	35,910	..	Do. ..	35,910	..	..	..
			Mds. Vis.		Mds. Vis.		Mds. Vis.			Mds. Vis.		Mds. Vis.	
		Other minor produce.	210 ½	..	104 3¼	..	314 3¾	..	Do. ..	313 7¼	..	0 4½	..
					No.		No.			No.			
	II. Pollâchi Range.	Teak	..	..	152	2,597	152	2,597	Do. ..	152	2,597	..	..
		Rosewood	..	..	49	743	49	743	Do. Angalakurichi ..	40	640	..	..
									To Anaimalai ..	9	103		
					Mds. Vis.		Mds. Vis.			Mds. Vis.			
		Dammer, 1st, 2nd and 3rd sort.	..	..	186 4½	..	186 4½	..	Do. ..	185 7½	..	..	..
									Wastage	0 5	..		
		Wax	..	..	141 0	..	141 0	..	Do.	1 4	..	..	..
									To Anaimalai ..	139 4	..		
					Meas.		Meas.			Meas.			
		Cardamom	..	..	1,672⅝	..	1,672⅝	..	Do.	1,672⅝	..	..	..
	IV. Punachi Range.	Honey	..	..	1,143¾	..	1,143¾	..	Do.	1,124¾	..	..	..
									Wastage	19	..		
					No.		No.			No.			
		Canes, 2nd, 3rd and 4th sort.	..	..	4,525	..	4,525	..	To Anaimalai ..	4,525	..	..	..
			Mds.		Mds. Vis.		Mds. Vis.			Mds. Vis.			
		Gallnuts	120	..	504 6	..	624 6	..	Do.	504 6	..	..	..
									Wastage	120 0	..		
		Miscellaneous minor produce.	..	..	60 0	..	60 0	..	Do.	0 2	..	..	..
									To Anaimalai ..	59 6	..		
					No.		No.			No.		No.	
	VII. Bolampatti Range.	Benteak	..	..	201	6,520	201	6,520	To Coimbatore ..	168	5,139	33	1,381

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
South Coimbatore—*cont.*	VII. Bolampatti Range—*cont.*	Vengai	..	..	No. 112	C. ft. 3,324	No. 112	C. ft. 3,324	To Coimbatore ..	No. 93	C. ft. 2,568	No. 19	C. ft. 756
		Rosewood	..	..	250	7,978	250	7,978	Do.	176	5,037	74	2,941
		Miscellaneous timber.	..	..	14	753	14	753	Do.	11	464	3	289
		Firewood	..	..	Tons. lb. 8 1,759	..	Tons. lb 8 1,759	..	Sold	Tons. lb. 8 213	..	..	..
									Dryage	0 1,546	..		
			Lgs. Scts.	C. ft. pts.	Lgs. Scts.	C. ft. pts	Lgs. Scts.	C. ft. pts.		Lgs. Scts. pts.	C. ft. pts.	Lgs. Scts.	C. ft. pts.
Madura.	I. Range ..	Teak	0 19	18 90	18 500	575 39	18 519	594 29	Sold	0—500	500 0	18 19	94 29
		Vengai	0 42	46 39	71 0	559 31	71 42	605 70	Do.	..	30 0	71 42	575 70
		Blackwood	0 17	16 30	130 0	555 36	130 17	571 66	Do.	..	..	130 17	571 66
	II. Range ..	Teak	..	..	4 0	16 0	4 0	16 0	Do.	4 0	16 0	..	..
		Vengai	23 0	264 73	797 1,000	2,232 79	820 1,000	2,496 152	Do.	811 1,000	2,476 94	9 0	20 58
			876 Sq. ft.=72		..	..	876 Sq. ft.=72.		Do.	876 Sq. ft =72.		..	..
		Miscellaneous timber.	15½	9 77	190 0 —14½ *	186 50	191 10	195 127	Do.	191 0	186 50	0 10	9 77
		Firewood	..	..	Ts. lb. 137 851 and No. 698	..	Ts. lb. 137 851 and No. 698	..	To depôt	Ts. lb. 137 851 & No. 698	..	..	..
	V. Range ..	Firewood	Ts. lb. 161 1,848	..	1,754 2,202	..	1,916 1,812	..	Sold	1,849 692	..	Ts. lb. 67 1,120	..
			..	..	2 found in excess of old stock.								
		Miscellaneous minor produce.	..	..	6 784	..	6 784	..	Do.	6—784	..	..	..
Tinnevelly.	Southern Range.		No.	C. ft.	No.	C. ft.	No.	C. ft.		No.	C. ft.	No.	C. ft.
		Teak	..	..	..	2	..	2	Sold	..	2	..	..
		Miscellaneous timber.	1,130	1,076	2,086 — 157	6,227 + 157†	3,059	7,460	Do.	970	3,929	1,613	2,863
									To Ambásamudram depôt.	357	514		
									Used by department ..	119	154		
					Ts. lb.		Ts. lb.			Ts. lb.			
		Firewood	..	..	581 2,100	..	581 2,100	..	Sold	581 2,100	..	..	..
		Charcoal	..	..	185 1,896	..	185 1,896	..	Do.	185 1,896	..	..	..
			Ts. lb.						Used by department ..	No. 100	..		
		Bamboos ..	2 490 —No. 817	..	No. 461	..	No. 1,684	..	Sold	„ 917	..	No. 667	
			lb. 1,807 ‡		Tons. lb.		Tons. lb.			Tons. lb.			
			No. =406	..	12 291	..	12 291	..	Do.	12 291	..		

* Converted into firewood. † Correction in the opening balances made by the District Forest-officer. ‡ Erroneously classed under minor produce in previous year.

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Tinnevelly—*cont.*	Southern Range—*cont.*	Honey	..	..	Meas. 997¼	C. ft. ..	Meas. 997¼	C. ft. ..	Sold	Meas. 87¼	C. ft. ..	Meas. 185½	..
									To Ambásamudram depôt.	725	..		
		Wax	..	..	Mds. Vis. 7 1½	..	Mds. Vis. 7 1½	..	Sold	Mds. Vis. 1 4	..	Mds. Vis. 1 1	..
			..	..	..	..	...	..	To Ambásamudram depôt.	4 4½	..		
		Cardamoms	..	..	0 ½	..	0 ½	..	Do. ..	0 ½	..	..	..
		Dammer	..	..	3 2½	..	3 2½	..	Sold	0 5	..	..	..
			..	..	..	..	..	..	To Ambásamudram ..	2 5½	..		
		Other minor produce.	..	..	Tons. lb. 0 168	..	Tons. lb. 0 168	..	Sold	Tons lb. 0 168	..	..	..
		Do.	..	..	Meas. 3,061½	..	Meas. 3,061½	..	Do. ..	Meas. 538	..	Meas. 225½	..
									To Ambásamudram ..	2,298	..		
	Northern Range.		..	..	2½ cotahs.	..	2½ cotahs.	..	Sold	2½ cotahs.	..	..	..
		Teak	..	..	..	100	..	100	Do.	..	100	..	..
		Miscellaneous timber.	..	..	..	1,960	..	1,960	Do.	..	1,960	..	..
		Firewood	..	..	Tons. lb. 380 0	..	Tons. lb. 380 0	..	Do.	Tons. lb. 380 0	..	..	..
		Charcoal	..	..	51 952	..	51 952	..	Do.	51 952	..	..	..
		Honey	..	..	Meas. 35	..	Meas. 35	..	To Vasudevanallur depôt.	Meas. 35	..	..	..
		Wax	..	..	Mds. Vis. 0 3¼	..	Mds. Vis. 0 3¼	..	Do. ..	Mds. Vis. 0 3¼	..	..	..
	Central Range.	Honey	..	..	Meas. 10 5/16	..	Meas. 10 5/16	..	Sold	Meas. 10 5/16	..	..	..
		Wax	..	..	Mds. Vis. 0 ¾	..	Mds. Vis. 0 ¾	..	Do.	Mds. Vis. 0 ¾	..	..	..
North Malabar.	Chedlet Kudrakote and Padri Range.			C. ft.		C. ft.		C. ft.			C. ft.		C. ft.
		Teak	..	67,689	..	..	..	67,689	Sold	..	60,853	..	6,702
									Used by department ..	..	134		
		Vengai	..	52	..	..	..	52	Do. ..	..	52	..	..
		Blackwood	..	3,954	..	..	..	3,954	..	..	..	..	3,954
		Miscellaneous timber.	..	..	..	75	..	75	Sold	..	75	..	..
		Honey	..	..	Tons. lb. 0 235	..	Tons. lb. 0 235	..	Do.	Tons. lb. 0 235	..	Tons. lb. ..	..
		Wax	20 lb.	..	0 26	..	0 46	..	Used by department ..	0 6	..	0 40	..
		Cardamoms	..	..	0 368	..	0 368	..	Sold	0 368	..	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
South Malabar.	Nilambúr range.	Teak	No. 5	C. ft. ..	No. 3	C. ft. ..	No.	C. ft.		No.	C. ft.	No.	C. ft.
			The equivalent of 5 logs of opening balance.			65	8	65	Sold	5	65	3	..
		Teak saplings ..	19,730	23,675	5,977	3,110	25,707	26,785	To Kallai depôt ..	25,613	26,785	94	..
		Blackwood	157	2,355	172	..							
			Difference in the estimate of 157 logs of the opening balance.			1,188	329	3,543	Sold	157	3,543	172	..
		Miscellaneous timber.	1,884	18,840	930	10,855	2,814	29,695	Do.	1,874	29,284	930	..
									To Kallai depôt ..	10	411		
		Bamboos	191	..	10,839	..	11,030	..	Do.	10,549	..	..	..
									Sold	62			
									Used by department ..	375			
									Lost in transit ..	44			
	New Amarapalem range.				Mds.		Mds.			Mds.			
		Wax	..	..	17	..	17	..	Sold	14	..	..	..
		Cardamom	..	..	5½	..	5½	..	To Nilambúr	3	..		
		Other minor produce.	..	..	52½	..	52½	..	Do. ..	5½	..	..	..
									Do. ..	52½	..	..	..
	Pálghat ..				No.		No.			No.			
		Vengai	..	..	1	32 90	1	32 90	Sold	1	32 90	..	..
		Blackwood	..	..	1	18 48	1	18 48	Do.	1	18 48	..	..
		Miscellaneous timber.	8	508	322	11,199 62	330	11,707 62	Do.	308	11,199 62	8	508
									Used by department ..	14			
		Kariyas, &c. ..	..	..	1,995	..	1,995	..	To kalkai depôt ..	1,995	..	..	..
		Bamboos	..	..	100	..	100	..	Used by department ..	100	..	..	..
		Do. Kayikols ..	..	..	66	..	66	..	Transferred to depôt ..	66	..	..	..
					Mds. Vis.		Mds. Vis.			Mds. Vis.			
		Honey	..	..	0 2½	..	0 2½	..	Sold	0 2½	..	..	..
		Wax	..	..	0 5	..	0 5	..	Do.	0 5	..	..	..
South Canara.	Condapoor range.		No.	C. ft. pts.	No.	C. ft. pts.	No.	C. ft. pts.		No.	C. ft. pts.	No.	C. ft. pts.
		Vengai	1	36 0	..	..	1	36 0	....	..	..	1	36 0
		Rosewood	33	888 4	..	3 6	33	892 0	Sold	1	21 0	22	498 6
									Written off account ..	10	372 4		
		Miscellaneous timber.	118	2,652 0	26	233 3	143	2,843 3	Sold	74	1,348 0	69	1,477 6
			Error in closing balance of previous year.		— 1	— 42 0			Otherwise disposed of.	..	17 7		
			Tons. lb		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Firewood	..	..	121 1,235½	..	121 1,235½	..	Sold	51 1,233½	..	70 0	..
									Otherwise disposed of.	0 2	..		
		Charcoal	0 112	..	..	..	0 112	..	Sold	0 112	..	..	..
		Honey	..	..	0 402	..	0 402	..	Do.	0 402	..	..	..
		Wax	0 16	..	0 570	..	0 586	..	Do.	0 525	..	0 61	..
		Other minor produce	18 1,429	..	49 754	..	67 2,183	..	Do.	53 1,813	..	14 370	..

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
South Canara—*cont.*	Udipi ..	Teak poles ..	No. ..	C. ft. pts. ..	No. 26	C. ft. pts. ..	No. 26	C. ft. pts. ..	Sold	No. 26	C. ft. pts. ..	No. ..	C. ft. pts. ..
		Miscellaneous timber.	49	1,483 0	1	19 0	50	1,502 0	....	..	..	50	1,502 0
					12		12		Sold	No. 12	..	..	..
			Tons lb.		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Minor produce ..	10 1,482	..	21 270	..	31 1,752	..	Do.	28 2,096	..	2 1,211	..
									Otherwise disposed of.	685	..		
	Uppinangadi.	Vengai	No. 1	55 8	No. 2	12 0	No. 3	67 8	To depôt	No. 3	67 8	..	..
		Rosewood	2	82 4	..	..	2	82 4	Do.	2	72 9	..	9 5
		Miscellaneous timber.	187	5,060 4	314	8,615 1			Sold	92	1,418 7		
			Correction of previous year's closing balance.		+ 45	1,273 9	546	14,949 4	To depôt, Mangalore..	260	6,796 9	180	6,733 8
									Otherwise	14	..		
		Bamboos	..	..	300	..	300		....	..	..	No. 300	
			Tons lb.		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Minor produce ..	1 462	..	178 17	..	179 479	..	Sold	174 118	..	5 326	..
									Otherwise	35	..		
		Do. ..	..	..	No. 1,739	..	No. 1,739		Sold	No. 825		No. 914	
		Vengai	..	..	1	..	1	..	Do.	1	..	..	..
			Tons lb.		Tons. lb.		Tons. lb.			Tons. lb.		Tons. lb.	
		Firewood	..	..	253 143	..	253 143	..	Do.	242 1,135	..	10 746	..
	Mangalore ..								Otherwise disposed of.	502	..		
		Charcoal	2 964	..	..	..	2 964	..	....	..	..	2 964	..
		Bamboos	No. 2,500				No. 2,500		....			No. 2,500	
			Tons lb.		Tons. lb.		Tons. lb			Tons. lb.		Tons. lb.	
		Minor produce ..	4 2,196	..	19 1,452	..	24 1,408	..	Sold	23 1,529	..	0 2,119	..
	Kásargód Range.	Rosewood trees ..	..	..	No. 13	..	No. 13		Do.	No 13		..	..
			Tons lb.		Tons. lb.		Tons. lb.			Tons. lb.		..	..
		Minor produce ..	0 454	..	24 1,770	..	24 2,224	..	Do.	24 946	..	0 1,278	..
									Grand Total.				
			Lgs. Scts.	C. ft.	Lgs. Scts.	C. ft.	Lgs. Scts.	C. ft.		Lgs. Scts.	C. ft.	Lgs. Scts.	C. ft.
		Teak	266 19	81,339	1,087 500	41,833	1,353 519	123,172	Sold	11 500	61,536	859 19	47,057
									Depôt	474 0	13,886		
									Otherwise	9 0	693		
			..	..	No. 26	..	No. 26	..	Sold	No. 26	..	..	..
		Teak saplings ..	19,730	23,675	5,977	3,110	25,707	26,785	Depôt	25,613	26,785	94 0	..
									Sold	159	3,582		
		Rosewood ..	192 17	7,295	602	10,486	794 17	17,781	Depôt	227	5,853	398 17	7,974
									Otherwise disposed of.	10	372		
									Sold	850 1,000	2,694		
		Vengai	25 42	454	1,443 1,000	6,539	1,468 1,042	6,993	Depôt	518	2,911	100 42	1,388
			876 Sq. ft.	= 72	..	..	876 Sq. ft. = 72.		Sold	876 Sq. ft. = 72.		..	..
									Do.	6,217 70	51,755		
		Miscellaneous timber.	3,442	30,110	8,577	81,029	12,019	111,139	Depôt	1,466	10,574	4,116 10	48,481
									Otherwise	220	329		
		Do.	..	..	71 =	2,990	71 =	2,990	Sold	71 =	2,990	..	..

Statement of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.		Total.		Disposed of during year.			Balance at end of year.	
			Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
							Grand Total—cont.						
		Redwood roots ..	..	..	Tons. lb. 359 ..	= 17,950	Tons. lb. 359 ..	= 17,950	Depôt	Tons. lb. 359 ..	= 17,950	..	..
		Firewood and charcoal	Tons lb. 459 561	..	11,837 1,938½	..	12,297 259½	..	Sold	9,897 977½	..	Tons lb. 823 2,180	..
									Depôt	1,474 1,436			
									Otherwise	101 146			
		Do. do. ..	..	..	..	16,028	..	16,028	Sold	..	14,130	..	..
									Depôt	..	1,898		
		Do. do. ..	..	..	No. 14,259	..	No. 14,259	..	Depôt	No. 14,253	..	..	..
									Sold	,, 6			
		Bamboos	2—490 =No. 817 * 1,807 lb. =No. 406 No. 2,691 =Tons 54	..	,, 13,414	..	,, 17,328	..	Sold	,, 1,203	..	No. 3,467	..
									Depôt	,, 12,039			
									Otherwise	,, 619			
		Do.	..	..	Tons. lb. 12 291 = No. 2,426 Bundles. 21	..	Tons. lb. 12 291 = No. 2,426 Bundles. 21	..	Sold	Tons. lb. 12 291 = No. 2,426	..	..	..
									Sold	21 Bundles.			
		Sandalwood ..	..	..	Tons. lb. 28 666= No. 10	1,417	Tons. lb. 28 666= No. 10	1,417	Depôt	Tons. lb. 28 639	= 1,414	..	..
									Sold	27 lb	= 1		
			Mds. lb. *3,536 19						Sold	No. 10			
		Minor produce ..	Meas. 1,269½ = 1,269½ ms.	..	Mds. lb. 29,323 3	..	Mds. lb. 34,129 9	..	To depôt	Mds. lb. 1,467 21½	..	Mds. lb. 2,156 15	..
									Sold	29,134 ½			
									Otherwise disposed of.	1,370 22			
		Do. ..	Meas. 1,552½ Mds. = 1,552	..	Meas. 9,394½ = 873 mds.	..	Meas. 10,947 =2,425 mds.	..	Depôt	Meas. Mds. 7,211½ = 603	..	Meas. 1,481 =185 mds.	..
									Sold	2,235½ = 255			
									Otherwise	19 = 2 and 1,380			
		Do. ..	..	..	2½ cotahs = 5 mds.		2½ cotahs. = 5 mds.		Sold	2½ cotahs. = 5	..	..	..
		Do. ..	No. 175 = 22 mds.	..	No. 71,324 = 232 mds.	..	No. 71,499 = 254 mds.	..	Depôt	No. 55,060 = 125	..	No. 914 =3 mds.	..
									Sold	15,525 = 126	..		

* 1807 lb. Erroneously classed under minor produce in previous year.

DISTRICTWAR ABSTRACT OF FORM No. 69 showing the collection of Timber, &c., in the Southern Circle during the year 1888-89.

—	Timbers.						Firewood and charcoal.	Bamboos.	Sandal-wood.	Minor produce.	Remarks.
	Teak.	Black or rose-wood.	Vengai.	Other timbers.	Redwood roots.	Total timber.					
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	No.	C. ft.	MDS.	
Stock of the Circle at beginning of the year.	105,014	7,296	527	30,110	..	142,947	Tons 459 = 18,360	Tons 56 = No. 3,508 + 1,807 lb. = No. 406.	..	Tons 72 = 6,451 mds. —(a) 1,807 lb. = 72 mds.	(a) Bamboos erroneously classed under minor produce in previous year.
Chingleput	..	..	..	6	..	6	(f) 51,660	..	..	..	(b) Estimate of 14 casuarina trees.
North Arcot	..	..	..	(b) 140	Tons 359 = 17,950 C. ft.	18,090	(g) 44,051	..	(e) 782	..	(c) Estimate of 45 casuarina trees.
South Arcot	..	..	378	3,110	..	3,488	(f) 45,865	2	..	(k) 150	(d) Includes 2,400 cubic feet, estimate of 12 boats.
Salem	9	..	..	1,011	..	1,020	(h) 10,529	1,424	(e) 632	..	(e) Estimates at 50 cubic feet per ton.
Trichinopoly	..	..	..	(c) 450	..	450	(f) 200,811	243	..	(l) 1,226	(f) Estimates at 40 cubic feet per ton.
Tanjore	..	..	..	..	..	..	..	..	..	..	(g) Includes 60 cubic feet, the estimate of 6 trees and 36,180, the equivalent of Tons 904—1,033.
North Coimbatore	..	..	..	..	..	..	..	..	(e) 3	..	(h) Includes 2,312, estimate of 11,560 engine fuel.
South ,, ...	41,066	8,721	3,334	36,144	..	89,255	(f) 351	..	..	(m) 1,563	(i) Includes 70 cubic feet, estimate of 698 cross bars.
Madura	591	555	2,792	185	..	4,123	(i) 75,765	..	..	569	(j) Estimate of 1,995 Kariya poles.
Tinnevelly	102	..	..	8,344	..	8,446	(f) 47,968	2,387	..	(n) 535	(k) Includes 106 mds., estimate of No. 29,325, cotton pods, &c
North Malabar	..	..	..	75	..	75	..	..	..	25	(l) Includes 138 mds., estimate of 1,104 measures of gallnuts.
South ,, ...	3,175	1,206	33	22,055	..	26,469	(j) 19,950	11,005	..	76	(m) Includes 343 mds., estimate of 4,186 measures and No. 40,260.
South Canara	..	4	12	(d) 12,499	..	12,515	14,985	300	..	(o) 26,289	(n) Includes 517 mds., estimate of 4,104 measures and 2½ cotahs.
Collection during the year for the Circle.	44,943	10,486	6,539	84,019	17,950	163,937	511,935	15,861	1,417	30,433	(o) Includes 6 mds., estimate of 1,739 canes.
Total ..	149,957	17,782	7,066	114,129	17,950	306,884	530,295	19,775	1,417	36,812	(p) Includes 386 mds., estimate of 2,236 measures, 2½ cotahs and No. 15,525.
Sold in the Forests	61,536	3,582	2,767	54,745	..	122,630	410,087	3,650	3	(p) 29,520	(q) Includes 188 mds., estimate of No. 914 canes and 1,481 measures.
Otherwise disposed of	693	372	..	329	..	1,394	4,043	619	..	2,752	
Removed to sale depôts	40,671	5,853	2,911	10,575	17,950	77,960	83,216	12,039	1,414	2,197	
Total disposals ..	102,900	9,807	5,678	65,649	17,950	201,984	497,346	16,308	1,417	34,469	
Stock in the forest on 31st March 1889.	47,057	7,975	1,388	48,480	..	104,900	32,949	3,467	..	(q) 2,343	

ANNUAL FORM

Forest Department,

RECEIPTS and Issues of Timber and other

District.	Range.	Name of Depôt.	Description of Timber and other Produce.	ON HAND, 1st APRIL 1888.		RECEIVED DURING THE YEAR.		
				Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.
Chingleput.	..	..	..					
North Arcot.	..	Mámandúr.	Redwood roots and stumps.	Tons. lb. 126 0	..	Mámandúr forest.	Tons. lb. 97 0	..
	..	Nagapatla.	Do. ..	200 0	..	Chamala.	262 0	..
	..	Vellore Jail depôt.	Babul, &c., firewood.	166 319¼	..	Buthur tank bed, &c.	87 1,033	..
	..	Sandalwood depôt.	Sandalwood roots.	32 506	..	Javadi hills.	15 1,404	..
South Arcot.	I. Range.	Tiruvannámalai depôt.	Vengai	..	C. ft. ..	Chengam and Chekadi forests.	No. 422	C. ft. 275 6
			Miscellaneous timber.	No. 6	24 11	Do. ..	317	523 3
			Sandalwood billets.	Tons. lb. 0 1,949	..	..	Tons. lb. ..	..
			Honey	..	..	Tiruvannámalai forest.	0 336	..
			Wax	..	..	Do. ..	0 35	..
	II. Range.	Tindivanam depôt.	Firewood ..	..	..	Tindivanam taluk forest.	20 0	..
			Sandalwood roots.	1 222	..	..	..	..
			Honey	..	..	Tindivanam taluk forest.	0 20	..
			Wax	0 4	..	..	..	..
	IV. Range	Chidambaram depôt.	Miscellaneous timber.	..	..	Plantation.	No. 1	1 6
			Kandan, &c., firewood.	5 1,022	..	Chidambaram, &c., forests.	Tons. lb. 3 0	..
		Cuddalore depôt.	Sandalwood billets.	..	..	..	0 1,652	..
		Head-quarter office.	Sandalwood billets.	0 44	..	..	..	..
		Cuddalore depôt.	Honey	..	..	Cuddalore taluk forests.	0 12¾	..
		..	Wax	..	..	Do. ..	0 ¾	..
		Chidambaram depôt.	Silk cotton pods ..	..	..	Chidambaram taluk forests.	No. 14,625	..
Salem.	..	Dharmapuri and Hosúr Range.	Teak	No. 2	C. ft. 4 4	Melagiri, &c.	No. 3	C. ft. 0 9
			Vengai	2	3 11	..	..	..

No. 70.

Madras, Southern Circle.

Produce in Sale Depôts during the year 1888-89.

Total.		Disposed of during the year.			Balance on 31st March 1889.		Remarks.
Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	
Nil.							
Tons. lb.			Tons. lb.		Tons. lb.		
223 0	..	Sold	175 0	..	48 0	..	
462 0	..	Do.	125 0	..	337 0	..	
		Sold and supplied to Vellore Central Jail.	119 1,896	..			
253 1,352¼	..	Sold and supplied to Vellore manufactory.	44 1,596	..	11 100¼	..	
		Written off ..	78 0	..			
47 1,910	..	Sold	31 1,131	..	16 779	..	
No.	C. ft.		No.	C. ft.	No.	C. ft.	
422	275 6	Sold	418	260 6	4	15 0	
		Do.	225	480 10			
323	548 2	Decrease in measurement.	..	0 3	98	67 1	
Tons. lb.			Tons. lb.		Tons. lb.		
		Sold	0 98	..			
0 1,949	..	To Cuddalore depôt.	0 1,652	..	..	..	
		Dryage	0 190	..			
0 336	..	Sold	0 336	..	..	..	
0 35	..	Do.	0 35	..	..	..	
20 0	..	Do.	20 0	..	..	..	
1 222	..	..	..	..	* 1 222	..	* Not in stock.
		Sold	0 17½	..			
0 20	..	Kept as specimen in No. II Range office.	0 2½	..	..	..	
0 4	..	Sold	0 4	..	..	..	
No.			No.				
1	1 6	Do.	1	1 6	..	..	
Tons. lb.			Tons. lb.				
8 1,022	..	Do.	6 1,014	..	2 8	..	
0 1,652	..	Do.	0 336	..	0 1,316	..	
0 44	..	Do.	..	..	0 44	..	
0 12½	..	Do.	0 12½	..	..	..	
0 ¼	..	Do.	0 ¼	..	..	..	
No.			No.				
14,625	..	Do.	14,625	..	..	..	
No.	C. ft.		No.	C. ft.			
5	13 4	Sold and supplied to Remount depôt.	5	13 4	..	..	
2	3 11	Sold	2	3 11	..	..	

Receipts and Issues of Timber and other Produce

District.	Range.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1888. Number or quantity.	On hand, 1st April 1888. Cubic feet.	Received during the year. Whence received.	Received during the year. Number or quantity.	Received during the year. Cubic feet.
Salem—*cont.*	..	Dharmapuri and Hosúr Range—*cont.*	Miscellaneous timber	No. 2	C. ft. 3 1	..	478	C. ft. 1,011 0
			Firewood ..	..	..	..	..	1,898 0
			Engine fuel ..	..	..	Morur block	11,560	..
			Bamboos	..	..	..	1,424	..
			Sandalwood billets, roots.	Tons. lb. 1 672	..	..	Tons. lb. 12 1,333	..
Trichinopoly.	..	Tiruvádi ..	Firewood	Tons. lb. 70 1,792	..	Kolamanikam, Karaipakam, Aramanaikurchi and Tiruvengam.	Tons. lb. 380 448	..
	..	Kumbakónam.	Do.	9 448	..	Sattampadi, Valakurchi.	846 1,344	..
Tanjore.	..	..	..					
North Coimbatore.	..	Satyamangalam.	Sandalwood ..	Tons. lb. 0 1,681¼	..	Talavadi forest.	Tons. lb. 0 142	..
South Coimbatore.	..	Coimbatore	Teak logs and rafters.	No. 336	C. ft. 11,841	Vellarugu	563	C. ft. 21,622
						Excess by re-measurement.		1
			Benteak	..	..	Bolampatti.	168	5,139
			Vengai and Mal Vengai.	..	..	Do. ..	93	2,568
			Rosewood ..	..	..	Do. ..	176	5,037
			Miscellaneous timber.	..	..	Do. ..	11	464
	..	Vellaruguadivaram.	Teak logs and rafters.	433	15,818	I. Range..	151	6,140
								—
			Miscellaneous timber.	1	17	Do. ..	32	853
	..	Venthamudi.	Teak logs ..	14	726	..	..	..
	..	Polláchi ..	Teak logs and rafters.	276	3,673	Vellarugu.	18	217
	..	Angalákurchi depôt.	Rosewood	..	..	II Range ..	40	640
	..	Anaimalai	Teak logs ..	..	..	Do. ..	152	2,597
			Rosewood	..	..	Do. ..	9	103
			Dammer (1st, 2nd and 3rd sort).	..	..	..	Mds. Vis. 302 2½	..
			Honey	..	..	..	Meas. 1,192½ 0	..
			Wax	..	..	..	Mds. Vis. 201 6½	..
			Cardamom ..	..	..	..	† 72 1	..
			Canes (1st, 2nd 3rd and 4th sort).	..	..	..	No. * 40,435	..

in Sale Depôts during the year 1888-89—*cont.*

Total.		Disposed of during the year.			Balance on 31st March 1889.		Remarks.
Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	
No. 480	C. ft. 1,014 1	Sold	No. 471	C. ft. 929 1	No. 9	C. ft. 85 0	
..	1,898 0	Do.	..	1,898 0	..	..	
11,560	..	Do.	11,560	..	..	..	
1,424	..	Do	424	..	1,000	..	
Tons. lb. 13 2,005	..	Do.	Ton. lb. 1 703	..	Tons. lb. 12 1,302	..	
Tons. lb. 451 0	..	Sold	Tons. lb. 427 896	..	Tons. lb 23 1,344	..	
855 1,792	..	Do.	839 896	..	16 896	..	

Nil.

Tons. lb 1,823½	..	..	..	..	Tons. lb. 0 1,823½	..	
No.	C. ft.		No.	C. ft.	No.	C. ft.	
899	33,464 0	Sold	434	16,618 0	465	16,846 0	
168	5,139 0	Do.	168	5,139 0	..	..	
93	2,568 0	Do.	93	2,568 0	..	..	
176	5,037 0	Do.	176	5,037 0	..	..	
11	464 0	Do.	11	464 0	..	..	
584	21,958 0	To Coimbatore depôt.	563	21,622 0	..	..	
		To Pollâchi ..	18	217 0			
		Sold	3	109 0			
		Deficit found on re-measurement.	..	10 0			
33	870 0	Sold	29	757 0	4	113 0	* Treated as teak in previous year.
14	726 0	Transferred to F. No. 6.	14	726 0	..	..	Because Venthamudi is not a sale depôt.
294	3,890 0	Sold	219	2,144 0	75	1,746 0	
40	640 0	Sold	40	611 0	..	..	
		Discount ..	..	29 0			
152	2,597 0	Sold	151	2,448 0	..	..	
		Discount allowed.	..	127 0			
		Used by dept.	1	22 0			
9	103 0	Sold	9	98 0	..	..	
		Discount allowed.	..	5 0			
Mds. Vis. 302 2½	..	Sold	Mds. Vis. 301 1½	..	..	..	
		Wastage ..	1 1½	..			
Meas. 1,192½	..	Sold	Meas. 1,192	..	..	..	
		Wastage ..	½	..			
Mds. Vis. 201 6½	...	Sold	Mds. Vis. 200 6½	..	..	..	
		Wastage ..	1 ½	..			
72 1	..	Sold	72 1	..	..	..	† Equivalent of 2,961 measures of cardamoms.
No. 40,435	..	Do.	No. 40,435	..	..	..	

Receipts and Issues of Timber and other Produce

District.	Range.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1888.		Received during the year.		
				Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.
South Coimbatore—*cont.*	..	Annaimalai—*cont*	Other minor produce.	..	..	..	Mds. Vis. 878 7	..
Madura.	..	Kodaikánal firewood depôt.	Firewood ..	Tons. lb. 176 610	..	Gundan shola and other plantations.	Tons. lb. 136 851 and 608 cross bars.	..
Tinnevelly.	Southern Range.	Ambásamudram depôt.	Kongu logs ..	No. 14	C. ft. 18	Pambanár Kariar, &c.	No. 357	C. ft. 514
			Bamboo pattais ..	lb. 1,549= No. 830	..	..	..	..
			Honey	..	..	Mandantorai, &c., forests.	Meas. 725	..
			Wax	..	..	Do ..	Mds. Vis. 4 4½	..
			Other minor produce.	..	..	..	2 5¾	..
							Meas. 2,298	..
		Tinnevelly Cusba depôt.	Bamboo pattais ..	Tons. lb. 4 476= No. 5,055	..	..	..	..
	Northern Range.	Vasudeva Nallur depôt.	Honey	..	..	..	35	..
	..	..	Wax	..	..	..	Mds. Vis. 0 3½	..
North Malabar.	..	..	..					*Nil*
South Malabar.	..	Nilambúr.	Wax	..	..	Amaram palam forest.	Mds. 3	..
			Cardamom ..	..	..	..	5½	..
	—		Other minor produce.	.. No. 16,659	.. C. ft. 15,703	.. Nilambúr plantations.	52½ No. 25,613	.. C. ft. 26,785
			Teak saplings, superior, small and classified.					
			Miscellaneous timber.	20	200	Old stock left out. The excess equivalent of the opening balance 20.	10	411 623
	..	Kallai depôt.	Bamboos	..	..	Nilambúr. Purchased for rafting purposes.	10,549 3,660	..
			Do. Kayokols, Kariyas, &c.	.. 36	.. ..	.. ..	66 1,995	.. ..
South Canara.	..	Mangalore depôt.	Vengai	..	..	Uppinangadi.	No. 3	C. ft. 67 8
			Rosewood ..	..	..	Do. ..	2	72 9
			Miscellaneous timber.	..	..	Do. .. By re-measurement.	260	6796 9 2

in Sale Depôts during the year 1888-89—*cont.*

Total.		Disposed of during the year.			Balance on 31st March 1889.		Remarks.
Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	
Mds. Vis. 878 7	..	Sold .. .. Wastage ..	Mds. Vis. 878 3 0 4	.. ..	..	..	
Tons. lb. 313 1,461 and No. 698	.. ..	Sold .. .. Written off .. Sold	Tons. lb. 221 1,005 31 985 No. 698	.. .. ..	Tons. lb. 60 1,711	..	
No. 371	532	Sold .. .. Used by dept.	No. 90 277	C. ft. 121 390	No. 4	C. ft. 21	
830	..	Sold .. .. Used by dept.	No. 750 80	..	..	..	
Meas. 725	..	Sold	Meas. 30¾	..	Meas. 694½	..	
Mds. Vis. 4 4½ 2 5½	.. ..	Do.	Mds. Vis. .. 0 4½	.. ..	Mds. Vis. 4 4½ 2 1½	.. ..	Ton lb. = 1 110
Meas. 2,298	..	Do.	Meas. 2,998	..			
No. 5,055	..	Do.	No. 5,055	..	..	..	
Meas. 35	..	Do.	Meas. 35	..	..	..	
Mds. Vis. 0 3¼	..	Do.	Mds. Vis. 0 3¼	..	..	..	
Mds. 3	..	..	..	..	Mds. 3	..	
5½	..	..	..	..	5½	..	
52½	..	Sold	Mds. 51	..	1½	..	
No. 42,272	C. ft. 42,488	Sold .. .. Rejected ..	No. 21,046 517	C. ft. 25,401 ..	No. 20,709	C. ft. 17,087	
30	1,234	..	..	..	30	1,234	
14,209	..	Sold	8,800	..	5,409	..	
66	..	Sold	66	..	..	..	
2,031	..	..	..	..	2,031	..	
No.	C. ft.		No.	C. ft.	No.	C. ft.	
3	67 8	Sold	3	67 8	..	..	
2	72 9	..	..	..	2	72 9	
260	6,797 1	Sold .. .. By re-measurement.	169	4,634 4 1 3	91	2,161 4	

Receipts and Issues of Timber and other Produce

District.	Range.	Name of Depôt.	Description of Timber and other Produce.	On hand, 1st April 1888.		Received during the year.		
				Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.
								GRAND
				No.	C. ft.		No.	C. ft.
			Teak	(a) 1,061	32,062	..	(b) 1,055	(b) 35,725
			Teak saplings ..	16,659	15,703	..	25,613	26,785
			Vengai	2	3 11	..	518	2,911 2
			Rosewood ..	..	..	..	227	5,852 9
			Miscellaneous timber.	43	263	..	1,466	(c) 11,197 10
			Redwood roots and stumps.	Tons. 326 = Tons. lb.	16,300 C. ft.	..	Tons. 359 = Tons. lb.	17,950 C. ft.
			Firewood	427 1,951½	..	..	1,474 1,436	..
			Do.	..	..	..	..	1,898
			Do.	No. 36	..	..	No. 14,253	..
			Bamboos	Tons. lb. 4 2,025 = No. 5,885	..	..	(d) 15,699	..
			Sandalwood ..	Tons. lb. 36 594½	..	..	Tons. lb. (e) 29 51	..
			Minor produce ..	Mds. lb. 0 4	..	..	Mds. lb. (f) 1,540 0	..
			Do. ..	..	..	..	No. 55,060	..
			Do. ..	..	..	..	Meas. (f) 4,250½	..

in Sale Depôts during the year 1888-89—*cont.*

TOTAL.		DISPOSED OF DURING THE YEAR.			BALANCE ON 31ST MARCH 1889.		Remarks.
Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	
TOTAL.							
No.	C. ft.		No.	C. ft.	No.	C. ft.	
2,116	67,787	Sold	980	26,471	540	18,592	(*a*) 1-17 teak classed under miscellaneous timber. (*b*) Includes 581-21,839 c. ft. received from other depôts.
		To other depôts	581	21,839			
		Otherwise disposed of.	15	885			
42,272	42,488	Sold	21,046	25,401	20,709	17,087	
		Otherwise ..	517	..			
520	2,915 1	Sold	516	2,900 1	4	15	
227	5,862 9	Sold	225	5,746	2	72. 9	
		Otherwise ..	..	34			
1,509	11,461	Sold	996	7,387 9	236	3,681 5	(*c*) Includes 623 c.ft., the excess equivalent of 20 logs of the opening balance.
		Otherwise ..	277	391-6			
Tons. 685=	34,250C.ft.	Sold	Tons. 800=	15,000C.ft.	Tons. 385=	19,250 C.ft.	
Tons. lb.			Tons. lb.		Tons. lb.		
1,902 1,747½	..	Sold	1,679 583	..	113 1,819½	..	
		Otherwise ..	109 985	..			
..	1,898	Sold	..	1,898	..	..	
No. 14,289	..	Sold	No. 12,258	..	No. 2,031	..	
21,584	..	Sold	15,095	..	6,409	..	(*d*) Includes 3,660 bamboos purchased at the depôt for rafting purposes.
		Otherwise ..	80	..			
			Tons. lb.		Tons. lb.		
Tons. lbs.		Sold	33 28	..			
65 645½	..	To other depôt	..	1,652	31 1,006½	..	(*e*) Includes 1,652 lb. received from other depôts.
		Otherwise ..	..	199			
Mds. lb.			Mds. lb.	..	Mds. lb.	..	
1,540 4	..	Sold	1,520 16	..	16 18	..	(*f*) Includes 72 Mds. and 3 lb., equivalent of 2,961 measures. — 104 Mds.
		Otherwise ..	2 20	..			
No. 55,060	..	Sold	No. 55,060	..	..	..	
Meas.			Meas.		Meas.		
4,250½	..	Sold	3,555½	..	694½	..	
		Otherwise ..	½	..			

Abstract of Form No. 70.

—	Timbers.						Firewood and charcoal.	Bamboos.	Sandal-wood.	Minor produce.	Remarks.
	Teak.	Black or rosewood.	Vengai.	Other timbers.	Redwood roots.	Total timbers.					
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	NO.	C. FT.	MDS.	
Stock on 1st April 1888 ..	47,782 (a) — 17	..	4	246 (a) + 17	Tons. 326= 16,300 C. ft.	64,332	Tons. 429= 17,497 C. ft.	Tons. 5= No. 5,885	Tons. 36= 1,813 C. ft.	..	(a) Miscellaneous timber erroneously classed under Teak in previous year.
Received from Forests ..	40,671	5,853	2,911	10,575	17,950	77,960	(c) 83,216	12,039	(b) 1,414	(e) 2,197	(b) Estimates at 50 cubic feet per ton.
Received from other sale depôts.	21,839	..	..	..	..	21,839	..	..	(b) 37	..	(c) Includes 22,332 cubic feet, estimate of No. 14,253.
Add quantity purchased and excess found in the depôt.	..	..	..	623	..	623	..	3,660	..	..	(d) Includes 2,382 cubic feet, estimate of No. 12,258.
Total ..	110,275	5,853	2,915	11,461	34,250	164,754	100,713	21,584	3,264	2,197	(e) Includes 657 maunds, estimate of 4,250 measures, and No. 55,060.
Sold from depôts	51,872	5,746	2,900	7,388	15,000	82,906	(d) 71,450	15,095	(b) 1,650	(f) 2,090	(f) Includes 570 maunds, estimate of 3,556 measures, and No. 55,060.
Otherwise disposed of ..	885	34	..	392	..	1,311	4,378	80	(b) 4	3	
Removed to other sale depôts.	21,839	..	..	..	..	21,839	..	..	(b) 37	..	(g) Includes 87 maunds, estimate of 694 measures.
Total ..	74,596	5,780	2,900	7,780	15,000	106,056	75,850	15,175	1,691	2,093	
Balance stock in depôts on 31st March 1889.	35,679	73	15	3,681	19,250	58,698	24,863	6,409	1,573	(g) 104	

Annual Form No. 71.

Forest Department, Madras, Southern Circle.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89.

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally.		C. FT. LB.	RS. A. P.	RS. A. P.	RS. A. P.			
Chingleput — Kambakam	I (*a*).	Junglewood	..	6 or 198	0 8 0 per cubic feet.	3 0 0	3 0 0	..	..	
	I (*b*).	Firewood stumps	..	Tons Lb. 44 1,120	1 0 0 per ton.	44 8 0	44 8 0	..	..	
Satheavedu	Do.	Do.	..	28 1,120	0 10 0	17 13 0	17 13 0	..	..	
Madras	Do.	Charcoal	..	9 *1,456 or 193 bags.	0 13 4 per bag.	160 13 4	160 13 4	..	..	* Obtained by conversion of 28 tons, 2,009 lbs. of wood.
Maiyur	Do.	Casuarina	..	1,091 1,281	4 0 0	4,375 7 6	4,375 7 6	..	..	
		Do.	..	28 ..	3 0 0	84 0 0	84 0 0	..	..	
		Do. branches	..	18 1,680	1 4 0	23 7 0	23 7 0	..	..	
		Do. do.	..	8 1,568	0 10 0	10 14 0	10 14 0	..	..	
Wallajabad	Do.	Do. wood	..	5 ..	2 8 0	12 8 0	12 8 0	..	..	
Chingleput	Do.	Firewood	..	55 1,512	Auction.	115 15 9	115 15 9	..	..	
		Total of I (*b*) ..	..	..	..	4,845 6 7	4,845 6 7	..	..	
		Total of the District ..	..	..	..	4,848 6 7	4,848 6 7	..	..	
		Sold from depôt.								
North Arcot — Mamandoor	I (*a*).	Redwood roots and stumps ..	Tons. 175	..	15 8 0 per ton.	2,712 8 0	2,712 8 0	..	..	
Nagapatla	Do.	Do. do. ..	,, 125	..	14 8 0 per ton.	1,812 8 0	1,812 8 0	..	..	
		Sold locally.								
Kilminnel	Do.	Casuarina trees	No. 14	..	At different rates.	34 8 0	34 8 0	..	..	
		Total of I (*a*) ..	..	..	..	4,559 8 0	4,559 8 0	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved	Remarks.
		Sold from depôt.	TONS. LB.		RS. A. P.	RS. A. P.	RS. A. P.			
North Arcot—*cont.* Vellore Central Jail..	I (*b*).	Casuarina, babul and jungle-wood.	164 1,252	..	3 4 0 per 1,000 lb.	1,197 15 2	1,015 14 4	..	..	
		Sold locally.								
Tiruvallam plantation.	Do.	Casuarina	579 ..	..	5 8 0 per ton.	3,184 8 0	1,600 8 0	..	..	
	Do.	Casuarina branches	196½ ..	..	3 0 0 per ton.	589 8 0	..	..	..	
Kilminnel plantation.	Do.	Do.	21 ..	..	2 8 0 per ton.	52 8 0	52 8 0	..	..	
Balampet topes ..	Do.	Casuarina trees	No. 6 ..	..	3 0 0 per tree.	18 0 0	18 0 0	..	..	
Ammundy	Do.	Casuarina branch wood ..	Tons. 3½ ..	..	2 8 0 per ton.	8 12 0	8 12 0	..	..	
Virinjipuram ..	Do.	Charcoal	1 ..	..	25 0 0 per ton.	25 0 0	25 0 0	..	..	
	Do.	Do.	1 ..	..	23 4 0 per ton.	23 4 0	23 4 0	..	..	
Poramboke lands ..	Do.	Babul	..	7,811	5 8 0 per cubic feet.	613 11 7	613 11 7	..	..	
	Do.	Do.	5 ..	..	5 8 0 per ton.	27 8 0	27 8 0	..	..	
	Do.	Do.	10 ..	..	6 0 0 per ton.	60 0 0	60 0 0	..	..	
		Total ..	..	..	..	5,800 10 9	3,445 1 11	..	..	
		Add outstandings of previous years realized	..	..	..	..	495 6 8	..	..	
		Total of I (*b*) ..	..	..	..	5,800 10 9	3,940 8 7	..	..	
		Sold from depôt.	Tons. Lb.							
Vellore Sandalwood depot.	I (*d*).	Sandalwood	8 2,180	..	5 14 0 per 28 lb.	4,217 6 6	4,217 6 6	..	..	
	Do.	Do.	.. 28	..	5 8 0 per 28 lb.	5 8 0	5 8 0	..	..	
	Do.	Do.	.. 28	..	5 0 0 per 28 lb	5 0 0	5 0 0	..	..	
	Do.	Do. roots	14 487	..	5 2 0 per 28 lb.	5,829 2 3	5,829 2 3	..	..	
	Do.	Do. chips	8 648	..	..	88 0 0	88 0 0	..	..	
		Total of I (*d*) ..	..	..	..	10,145 0 9	10,145 0 9	..	..	
		Total of the District ..	..	..	..	20,505 3 6	18,645 1 4	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality	Budget sub-head	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold from depot.			Rs. A. P.	Rs A. P.	Rs. A. P.			
Tiruvannámalai ..	I (*a*).	Vengai poles	264	220 6	1 0 0	220 8 0	220 8 0	264	..	
	Do.	Do.	154	40 0	0 6 0	15 0 0	15 0 0	154	..	
	Do.	Acha	2	2 1	1 0 0	2 1 4	2 1 4	2	..	
	Do.	Mango wood	6	24 11	Auction at different rates.	2 4 0	2 4 0	6	..	
	Do.	Miscellaneous poles	217	453 10		292 13 6	292 13 6	217	..	
Chidambaram ..	Do.	Do.	1	1 6	0 4 0	0 6 0	0 6 0	1	..	
		Sold locally.								
Chengam forest ..	Do.	Vengai poles	32	89 9	Different.	60 6 4	60 6 4	32	..	
	Do.	Miscellaneous poles	35	173 9	Do.	123 15 3	123 15 3	35	..	
Tiruvannámalai taluk forest.	Do.	Vengai poles	5	13 6	0 12 0	10 2 0	10 2 0	5	..	
	Do.	Miscellaneous timber poles ..	380	754 5	Different.	355 11 11	355 11 11	380	..	
Cuddalore forest ..	Do.	Casuarina poles..	2,293	1,264 10	Do.	245 6 3	245 6 3	2,293	..	
	Do.	Transport charge	..	..	..	10 10 0	10 10 0	..	..	
Chidambaram forest.	Do.	Kandan poles	..	156 0	Do.	17 4 0	17 4 0	c. ft. 156	..	
		Total ..	..	..	..	1,356 8 7	1,356 8 7	..	..	
		Add outstandings of previous years realized.	..	..	..	..	12 6 0	..	..	
		Total of I (*a*).	..	..	..	1,356 8 7	1,368 14 7	..	..	
South Arcot.		*Sold from depot.*						tons. lb.		
Tindivanam ..	I (*b*).	Firewood	Tons 20	..	6 0 0	120 0 0	120 0 0	20 0	..	
Chidambaram ..	Do.	Kandan firewood	,, 3	lb. 1,014	3 0 0	10 5 9	10 5 9	3 1,014	..	
	Do.	Casuarina	,, 3	..	2 8 0	7 8 0	7 8 0	3 0	..	
		Sold locally.								
Tindivanam forests.	Do.	Casuarina	,, 1	,, 1,120	Auction.	3 8 0	3 8 0	1 1,120	..	
Villupuram Do.	Do.	Babul firewood	,, 62	,, 320	4 8 0	279 10 3	279 10 3	62 320	..	
	Do.	Do.	,, 567	,, 320	5 8 0	3,119 4 5	3,119 4 5	567 320	..	
	Do.	Do.	,, 108	,, 906¾	4 0 0	433 9 11½	433 9 11	108 906¾	..	
	Do.	Do.	,, 9	..	3 0 0	27 0 0	27 0 0	9 0	..	
	Do.	Do.	..	112	Auction.	0 2 6	0 2 6	0 112	..	
Cuddalore forests ..	Do.	Casuarina	,, 265	,, 1,624	Different.	1,133 14 9	1,008 14 9	265 1,624	..	
Chidambaram do. ..	Do.	Do.	,, 17	..	Do.	21 13 0	21 13 0	17 0	..	
	Do.	Kandan firewood	,, 8	..	Do.	20 0 0	20 0 0	8 0	..	
		Total ..	..	..	..	5,176 12 7	5,051 12 7	..	..	
		Add outstandings of previous years realized.	..	..	..	..	1,116 15 5	..	..	
		Total of I (*b*).	..	..	..	5,176 12 7	6,168 12 0	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally—cont.								
Villupuram	I (*c*).	Bamboos	No. 2	..	Rs. A. P. 0 6 0	Rs. A. P. 0 12 0	Rs. A. P. 0 12 0	2	..	
		Sold from depôt.								
Tiruvannámalai ..	I (*d*).	Sandalwood billets	..	lb. 98	0 2 10½ a lb.	17 8 6	17 8 0	lb. 98	..	
Cuddalore	Do.	Do.	..	„ 336	0 3 0 a lb.	63 0 0	63 0 0	„ 256	..	
		Total of I (*d*) ..	..	..	..	80 8 0	80 8 0	..	..	
		Sold from depôt.								
Tiruvannámalai ..	I (*e*).	Honey	..	lb. 336	0 2 0 a lb.	42 0 0	42 0 0	lb. 336	..	
	Do.	Wax	..	„ 35	0 7 0 a lb.	15 5 0	15 5 0	„ 35	..	
Tindivanam ..	Do.	Honey	..	„ 17½	0 3 0 a lb.	3 4 6	3 4 6	„ 17½	..	
	Do.	Wax	..	„ 4	0 4 5 a lb.	1 1 8	1 1 8	„ 4	..	
South Arcot—*cont.* Cuddalore	Do.	Honey	..	„ 12 oz. 11	0 8 0 a lb.	6 5 6	6 5 6	lb. 12 oz. 11	..	
	Do.	Wax	..	.. „ 13	0 4 0 a lb.	0 3 3	0 3 3	.. 13	..	
Chidambaram ..	Do.	Silk cotton pods	No. 14,625	..	2 0 0 per 1,000	29 4 0	29 4 0	No. 14,625	..	
		Sold locally.								
Tiruvannámalai forests.	Do.	Neer Pungan seeds	..	lb. 640	0 3 0 a lb.	10 0 0	10 0 0	lb. 640	..	
	Do.	Wax	..	„ 17½	0 7 3 a lb.	7 14 11	7 14 11	„ 17½	..	
Tindivanam do.	Dô.	Woodapple fruit	No. 14,500	..	0 2 0 per 100	18 2 0	18 2 0	No. 14,500	..	
	Do.	Casuarina seedlings	„ 200	..	0 4 0 per 100	0 8 0	0 8 0	„ 200	..	
Villupuram do.	Do.	Honey	..	lb. 4	auction	0 12 6	0 12 6	lb. 4	..	
	Do.	Wax	..	pols. 3	0 0 5 a pol.	0 1 3	0 1 3	pols. 3	..	
Tirukoilûr do.	Do.	Honey	..	lb. 16	0 3 0 a lb.	3 0 0	3 0 0	lb. 16	..	
Kallakurchi	Do.	Honey	..	„ 23	0 4 0 a lb.	5 12 0	5 12 0	„ 23	..	
		Total of I (*e*) ..	..	..	..	143 10 7	143 10 7	..	..	
		Total of the District ..	..	..	..	6,758 3 9	7,762 9 2	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold from depôt.			Rs. A. P.	Rs. A. P.	Rs. A. P.	No.		
Salem — Pennagaram	I (*a*)	Acha	2	3 1	1 4 4	3 10 7	3 10 7	2	..	
Salem — Pennagaram	Do.	Vengai	2	.3 11	..	4 14 6	4 14 6	2	..	
Salem — Denkenicotah	Do.	Miscellaneous, including teak trees.	474	939 4	Different.	835 10 5	731 10 5	474	..	
		Total of I (*a*) ..	..	..	..	844 3 6	740 3 6	..	..	
		Sold from depôt.								
Salem	I (*b*)	Engine fuel	No. 11,560	..	1 0 0	289 0 0	289 0 0	11,560	..	
Salem — Denkenicotah	Do.	Firewood	..	1,898	..	128 6 3	107 13 3	8,217	..	
		Sold locally.								
Salem — Denkenicotah	Do.	Firewood	..	6,319						
		Total of I (*b*) ..	..	..	..	417 6 3	396 13 3	..	..	
		Sold from depôt.								
Salem — Do	I (*c*)	Bamboos	No. 424	..	..	54 0 0	54 0 0	424	..	
		Sold from depot.		Mds. lb.						
Salem — Do.	I (*d*)	Sandal-wood billets	..	72 16½	..	322 0 0	322 0 0	72 16½	..	
		Do. roots	..	37 9½				37 9½		
		Do. chips	..	7 17½				7 17½		
		Sold locally.								
Salem	Do.	Sandalwood	..	27	..	1 12 0	1 12 0	27	..	
Námakal forests	Do.	Do. pieces	No. 6	..	..	13 11 0	13 11 0	No. 6	..	
Tirupatúr do.	Do.	Do. do.	,, 4	..	..	0 11 0	0 11 0	,, 4	..	
		Total of I (*d*) ..	..	..	..	338 2 0	338 2 0	..	..	
		Total of the District ..	..	..	..	1,653 11 9	1,529 2 9	..	..	
		Sold locally.								
Trichinopoly — Elamanúr	I (*a*)	Vagai trees	3	..	10 0 0	30 0 0	30 0 0	No. 3	..	
Trichinopoly — Elamanúr	I (*a*)	Casuarina do.	5	..	1 8 0	7 8 0	7 8 0	,, 5	..	
Trichinopoly — Elamanúr	I (*a*)	Sissu do.	2	..	1 0 0	2 0 0	2 0 0	,, 2	..	
Trichinopoly — Kattalai	Do.	Miscellaneous do.	35	..	Different.	55 8 0	55 8 0	,, 35	..	
		Total of I (*a*) ..	..	..	..	95 0 0	95 0 0	..	..	
		Sold from depôt.						Tons. lb.		
Trichinopoly — Termadi	I (*b*)	Firewood	Tons 427	lb. 896	3 2 0	1,335 10 0	1,335 10 0	427 896	..	
Trichinopoly — Kumbakónam	Do.	Do.	,, 839	,, 896	Different.	3,627 7 0	3,627 7 0	839 896	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally.			Rs. A. P.	Rs. A. P.	Rs. A. P.	Tons. lb.		
Trichinopoly—*cont.* Yedaiyathimangalam.	I (*b*)	Firewood	Tons. 80	..	7 0 0	560 0 0	350 5 3	80 0	..	
Punganúr	Do.	Do.	,, 12	lb. 224	..	13 0 0	13 0 0	12 224	..	
Elamanúr	Do.	Do.	,, 307	,, 896	Different.	905 14 0	905 14 0	307 896	..	
Pettavaithalai	Do.	Do.	,, 8	..	0 15 0	7 8 0	7 8 0	8 0	..	
Manattattai	Do.	Do.	,, 346	,, 224	Different.	1,424 5 5	1,424 5 5	346 224	..	
Lalapet	Do.	Do.	,, 588	,, 945	Do.	2,241 10 5	2,241 10 5	588 945	..	
Sittalavoi	Do.	Do.	,, 420	..	Do.	1,293 0 0	1,293 0 0	420 0	..	
Kattalai	Do.	Do.	,, 302	..	Do.	1,033 0 0	1,033 0 0	302 0	..	
Mayanur	Do.	Do.	,, 246	,, 285	Do.	579 12 11	579 12 11	246 285	..	
Ambásamudram ..	Do.	Do.	,, 590	..	Do.	1,479 6 0	1,479 6 0	590 0	..	
Mahadanapuram ..	Do.	Do.	,, 142	,, 2,072	5 0 0	714 10 0	..	142 2,072	..	
	Do.	Do.	,, 121	..	4 8 0	544 8 0	544 8 0	121 0	..	
	Do.	Do.	,, 97	,, 73	4 0 0	388 2 1	..	97 73	..	
	Do.	Do.	,, 32	..	3 8 0	112 0 0	112 0 0	32 0	..	
	Do.	Do.	,, 50	..	0 8 0	25 0 0	25 0 0	50 0	..	
Sorupamalai	Do.	Do.	,, 96	,, 112	2 8 0	240 2 0	240 2 0	96 112	..	
Kavaipakkam	Do.	Do.	,, 18	..	6 0 0	108 0 0	108 0 0	18 0	..	
		Total of I (*b*) ..	..	..	..	16,632 15 10	15,320 9 0	..	..	
		Sold locally.								
Elamanúr	I (*c*).	Bamboos	No. 144	..	At 6 per rupee.	24 0 0	24 0 0	No. 144	..	
		Do. Bundles	,, 8	..	0 2 0	1 0 0	1 0 0	,, 8	..	
Manattattai	Do.	Do.	,, 78	..	At 6 per rupee.	13 0 0	13 0 0	,, 78	..	
		Do. Bundles	,, 13	..	0 2 0	1 10 0	1 10 0	,, 13	..	
		Total of I (*c*) ..	..	..	..	39 10 0	39 10 0	..	..	
		Sold locally.						Tons. lb.		
Pudúr	I (*c*).	Babul pod	Tons. 12	..	Auction.	26 0 0	26 0 0	12 0	..	
				lbs.						
Marmathur	Do.	Vembadam bark	..	$327\frac{6}{16}$ 1st class.	Do.	51 4 0	51 4 0	$1,256\frac{2}{16}$	..	
				$929\frac{1}{2}$ 2nd class.						
		Do.	..	$58\frac{1}{4}$ 1st class.	Different.	22 10 4	22 10 4	$175\frac{1}{12}$	..	
				$116\frac{2}{8}$ 2nd class.						
Sengattupatti	Do.	Gallnuts	Meas. 800	..	Auction.	47 6 3	47 6 3	Meas. 800	..	
Manalodai	Do.	Do.	,, 800	..	Do.	47 6 3	47 6 3	,, 800	..	
		Total of I (*c*) ..	..	..	..	194 10 10	194 10 10	..	..	
		Total of the District ..	..	..	..	16,962 4 8	15,649 13 10	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally.			Rs. A. P.	Rs. A. P.	Rs. A. P.	Tons. lb.		
Tanjore .. Vettangudi	I (*b*).	Firewood	Tons. 1	..	1 8 0	3 12 0	3 12 0	4 0	..	
	Do.	Do.	,, 3	..	0 12 0					
		Total of the District ..	..	..	..	3 12 0	3 12 0	..	..	
North Coimbatore. ..	..	....	..	..	..	..	..	..	..	
		Sold from depôt.								
South Coimbatore. Coimbatore	I (*a*).	Teak	414	16,422 11 9	Different.	25,177 2 7	25,133 6 0	414	..	
	Do.	Do. rafters	20	195 0 9	Do.	196 10 5	196 10 5	20	..	
	Do.	Benteak	168	5,138 11 2	6½ per candy.	2,672 3 11	2,672 3 11	168	..	411 $\frac{128}{160}$ candies.
	Do.	Rosewood	176	5,036 7 4	11 do.	4,432 3 6	4,432 3 6	176	..	402 $\frac{232}{320}$ do.
	Do.	Vengai	92	2,541 0 3	10 do.	2,032 13 1	2,032 13 1	92	..	203 $\frac{207}{1600}$ do.
	Do.	Agil	11	464 5 9	6½ do.	241 8 6	241 8 6	11	..	37 $\frac{48}{160}$ do.
	Do.	Mal Vengai	1	27 1 1	6½ do.	14 1 5	14 1 5	1	..	2 $\frac{400}{1600}$ do.
Vellarugu	Do.	Miscellaneous	29	757 7 9	Different.	426 2 6	426 2 6	29	..	
	Do.	Teak logs	3	109 6 11	Do.	176 12 8	176 10 8	3	..	
Pollâchi	Do.	Do. rafters	213	1,905 3 7	1 0 0	1,905 5 3	1,905 5 3	213	..	
	Do.	Do. logs	6	239 2 8	Different.	390 12 11	390 12 11	6	..	
Anaimalai	Do.	Do.	151	2,447 11 1	Do.	1,843 7 6	1,766 3 2	151	..	
	Do.	Rosewood	9	98 2 4	0 12 0	73 10 4	73 10 4	9	..	
Angalakurchi ..	Do.	Do.	40	610 10 6	Different.	421 8 0	421 8 0	40	..	
		Total of I (*a*) ..	..	..	..	40,004 6 7	39,883 3 8	..	..	
		Sold locally.								
Bolampatty	I (*b*).	Firewood	Tons. 8	lb. 213	5 0 0	40 7 7	40 7 7	..	..	
		Sold from depôt.								
Anaimalaï	I (*c*).	Dammer, 1st sort	..	Vis. 2¾	..	2 1 0	..	..	..	
	Do.	Do. 2nd Do.	Mds. 115	,, 5½	..	245 13 4	..	..	..	
	Do.	Wax	,, 61	,, 2$\frac{4}{15}$	..	579 7 9	..	..	..	
	Do.	Seekoy	,, 308	,, 6	..	326 15 9	..	..	..	
	Do.	Mattipal	..	,, 3¾	..	2 13 0	..	..	..	
	Do.	Pepper	..	,, 1½	..	1 5 0	..	..	..	
	Do.	Deer horns	,, 4	,, 7¼	..	13 7 11	..	..	..	
	Do.	Cardamoms	,, 37	,, 2¼	..	708 3 3	..	..	..	
	Do.	Honey	..	Meas. 67½	..	14 0 0	..	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold from depôt—cont.			Rs. A. P.	Rs. A. P.	Rs. A. P.			
South Coimbatore—*cont.* Anaimalai—*cont.*	I (*e*).	Canes, 1st sort	50	..	..	2 0 0	..	..	..	
	Do.	Do. 2nd do.	15,705	..	..	295 7 1	..	..	..	
	Do.	Do. 3rd do.	8,350	..	..	114 13 0	..	..	..	
	Do.	Do. 4th do.	8,888	..	..	66 10 7	..	..	..	
	Do.	Canes	2,917	..	..	12 2 0	..	..	..	
		Sold locally.	Mds. Vis.							
	Do.	Dammer, 1st sort	0 5½	..	..	2 12 0	..	..	..	
	Do.	Do. 2nd do.	171 2½	..	..	364 0 8	..	..	..	
	Do.	Do. 3rd do.	13 1	..	..	21 5 3	..	..	..	
	Do.	Seekoy	57 0	..	..	61 11 5	..	..	..	
	Do.	Wax	139 4	..	..	1,323 10 2	..	..	..	
	Do.	Mattipal	0 2	..	..	1 8 0	..	..	..	
Ponachi	Do.	Pepper	0 2½	..	..	2 3 0	..	..	..	
	Do.	Deer horns	2 1½	..	..	6 0 3	..	..	..	
	Do.	Cardamoms	34 6¾	..	..	662 0 6	..	..	..	
	Do.	Honey	Meas. 1,124½	..	..	250 5 4	..	..	..	
	Do.	Canes, 2nd sort	No. 2,444	..	..	48 14 0	..	..	..	
	Do.	Do. 3rd do.	„ 1,931	..	..	26 9 4	..	..	..	
	Do.	Do. 4th do.	„ 150	..	..	1 2 0	..	..	..	
	Do.	Gallnuts	Mds. 504 Vis. 2	..	..	409 5 9	..	..	..	
		Total of I (*e*) ..	..	..	..	5,566 11 4	5,557 3 3	..	..	
		Total of the District ..	..	..	..	45,611 9 6	45,480 14 6	..	..	
Madura .. Uttamapaliem ..	I (*a*)	Teak thinnings	..	C. ft. 500	Auction.	113 0 0	113 0 0	..	..	
	Do.	Vengai	..	„ 30	Do.	11 0 0	11 0 0	..	..	
	Do.	Teak	..	„ 16	Do.	32 0 0	32 0 0	..	..	
	Do.	Vengai	..	„ 155·29	2 0 0	316 14 9	316 14 9	..	..	
	Do.	Do.	..	„ 35·64	2 8 0	89 2 0	89 2 0	..	..	
	Do.	Do.	..	„ 277·305	Different.	519 3 10	519 3 10	..	..	
	Do.	Do.	..	„ 2008·71 & sq. ft. 85·75	Auction.	2,953 10 11	2,953 10 11	..	..	
Kodaikánal	Do.	Do.	..	„ 7·58	0 0 8	1 14 4	1 14 4	..	..	
	Do.	Do.	..	„ 40·43	0 4 0	10 1 9	10 1 9	..	..	
	Do.	Do.	..	„ 468·79	0 3 0	87 11 4	87 11 4	..	..	
	Do.	Miscellaneous	..	C. ft. 186·5	..	222 2 0	222 2 0	..	..	
	Do.	Do.	..	..	..	1 4 0	1 4 0	..	..	
	Do.	Amount of hire realized on Government carts.	..	..	..	38 8 6	38 8 6	..	..	
Alagar Hill	Do.	Junglewood	..	„ 61	Different.	7 6 0	7 6 0	..	..	
		Total of I (*a*) ..	..	..	..	4,403 15 5	4,403 15 5	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold from depôt.			Rs. A. P.	Rs. A. P.	Rs. A. P.			
Madura—*cont.* Kodaikánal	I (*b*)	Firewood	Tons 8	..	4 0 0	32 0 0	32 0 0	..	..	
	Do.	Do.	,, 212	lb. 1,745	3 0 0 per 1,000 lb.	1,429 14 0	1,429 14 0	..	..	
	Do.	Do.	,, ..	,, 1,500	2 0 0 per 1,000 lb.	3 0 0	3 0 0	..	..	
	Do.	Amount realized on sale of 698 cross bars	,, ..	,, ..	..	7 10 0	7 10 0	..	..	
	Do.	Amount of hire realized on Government carts	,, ..	,, ..	..	255 7 9	255 7 9	..	..	
		Sold locally.								
Madura—*cont.* Alagar Hill.. ..	Do.	Firewood	,, 1,224	,, 840	3 8 0	4,285 5 0	4,285 5 0	..	..	
	Do.	Do.	,, 1	,, 560	2 8 0	3 2 0	3 2 0	..	..	
	Do.	Do.	,, 172	,, 112	1 4 0	214 12 0	214 12 0	..	..	
	Do.	Do.	,, 359	,, 972	Different rates.	710 9 8	710 9 8	..	..	
	Do.	Do.	,, 2	..	Auction.	11 3 3	11 3 3	..	..	
	Do.	Do.	,, 90	,, 448	0 13 4	75 2 8	75 2 8	..	..	
		Total of I (*b*) ..	,, ..	..	..	7,028 2 4	7,028 2 4	..	..	
	Do.	I (*c*) Manure leaves and thatching grass	Ton. lb. 6 784	,, ..	Different rates.	18 5 6	18 5 6	..	..	
		Honey	Meas. 40	,, ..	Auction.	25 0 0	25 0 0	..	..	
		Total of I (*c*) ..	,, ..	..	..	43 5 6	43 5 6	..	..	
		Total of the District ..	,, ..	..	..	11,475 7 3	11,475 7 3	..	..	
		Sold from depôt.		C. ft.						
Tinnevelly. Ambásamudram ..	I (*a*)	Kongulogs, &c.	No. 90	120 10 0	Different.	135 13 8	135 13 8	90	..	
		Sold locally.								
Pambanar, Kannikatti, Enjithavalam and Ullar forests ..	Do.	Teak	.. ..	102 0 0	Different.	31 0 0	31 0 0	102	..	
	Do.	Kongu planks	,, 187	924 0 0	1 12 0 per cubic feet.	1,617 0 0	1,617 0 0	187	..	
	Do.	Kongu planks, &c.	,, 531	888 10 11	Do.	970 11 6	970 11 6	531	..	
Pachapil forest ..	Do.	Do.	,, 246	351 5 10	Do.	379 6 6	379 6 6	246	..	
Mimdanthorai, Manjur Theri, and Tharivillanparai forests	Do.	Miscellaneous timbers	,, ..	1,729 0 0	Do.	159 14 9	159 14 9	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally—cont.								
Tinnevelly *cont* — Papanasam	I (*a*)	Kongu logs	6	37 4 0	Rs. A. P. 1 12 0 per C. ft.	Rs. A. P. 65 5 4	Rs. A. P. 65 5 4	No. 6	..	
Aiyinathadam, Nenjumutti and Arinjanodai forests.	Do.	Miscellaneous timber	..	1,958 0 0	Auction.	229 0 0	229 0 0	C. ft. 1,958	..	
		Total of I (*a*) ..	..	..	..	3,588 3 9	3,588 3 9	..	..	
		Sold locally.						Tons. Lb.		
Mundanthorai, Manjeri Teri and Thari-villangarai forest.	I (*b*)	Firewood	Tons 16	lb. 1,120	3 3 0 per ton.	52 9 6	52 9 6	16 1,120	..	
	Do.	Do.	,, 7	,, 1,120	5 4 0 per ton.	39 6 0	26 4 0	7 1,120	..	
	Do.	Do.	,, 557	,, 2,100	Different.	964 1 10	964 1 10	557 2,100	..	
Valaikulam hill ..	Do.	Do.	,, 30	..	Auction.	120 0 0	120 0 0	30 0	..	
Nenjumutti, &c, forest.	Do.	Do.	,, 350	..	Do.	982 8 0	755 0 0	350 0	..	
Mandanthorai, &c., forest.	Do.	Charcoal	,, 185	,, 1,896	Different.	1,241 14 0	1,241 14 0	185 1,896	..	
Nenjumutti, Aiyanathadam and Arinjanodai forest.	Do.	Do.	,, 51	,, 952	Auction.	540 2 10	540 2 10	51 952	..	
		Outstanding revenue of the previous year realized.	..	..	..	..	16 8 0	..	..	
		Total of I (*b*) ..	..	..	..	3,940 10 2	3,716 8 2	..	..	
		Sold from depôt.								
Ambásamudram ..	I (*c*)	Bamboo pattais	No. 750	..	Different.	14 10 0	14 10 0	No. 750	..	
Tinnevelly	Do.	Do.	,, 5,055	..	Auction.	90 4 0	90 4 0	,, 5,055	..	
		Mixed sale.								
Kariar forest and depôt.	Do.	Bamboo mallas	,, 355	..	1 8 0 per 300	1 12 4	1 12 4	,, 355	..	
		Do. varies	,, 112	..	1 8 0 per 200	0 13 5	0 13 5	,, 112	..	
		Do. pattais	,, 450	..	1 8 0 per 600	1 2 0	1 2 0	,, 450	..	
Mundanthorai and Thari Villanparai forests.	Do.	Bamboos	..	lb. 112	1 anna per 56 lbs.	0 2 0	0 2 0	lb. 112	..	
		Sold locally.								
Tambraparni river side.	Do.	Bamboos	23 141/400 cart loads.	..	Different.	313 11 4	313 11 4	23 141/400 cart loads	..	
	Do.	Do.	20 Head loads.	..	Auction.	1 1 0	1 1 0	20 Head loads.	..	
		Total of I (*c*) ..	..	..	..	423 8 1	423 8 1	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold from depôt.			Rs. A. P.	Rs. A. P.	Rs. A. P.			
Tinnevelly—*cont.* Vasudevanallur ..	I (*e*)	Honey	Meas. 35	..	Different	41 6 0	41 6 0	Meas. 16	..	
Ambásamudram ..	Do.	Do.	,, 30¾	..	do.	33 8 6	33 8 6	Meas. 30¾	..	
Vasudevanallur ..	Do.	Wax	pols. 131	..	9-8-0 per 144 pols.	8 10 3	8 10 3	pols. 131	..	
Ambásamudram ..	Do.	Dammer	,, 173	..	1-12-0 per 144 pols.	2 1 8	2 1 8	do 173	..	
Do. ..	Do.	Cardamoms	tolams. pols. 28 0	..	Rs. 13 per tolam.	364 0 0	364 0 0	tolams. pols. 28 0	..	
Do. ..	Do.	Gallnuts	2,298 Measures, = 17 pothis — 1,180 pols	..	Rs. 9-10-0 per pothy of 2,000 pols	169 4 11	169 4 11	Meas. 2,298	..	
		Sold locally.								
Tenkási forests ..	Do.	Honey	Meas. 10 5/16	..	Different.	10 0 6	10 0 6	,, 10 5/16	..	
Mandanthorai, &c., forests.	Do.	Do.	,, 34	..	do.	42 11 0	42 11 0	,, 34	..	
Nángunéri forests ..	Do.	Do.	,, 53½	..	do.	47 9 0	47 9 0	,, 53¼	..	
Tenkási do. ..	Do.	Wax.	pols. 30	..	Rs 11-0-0 per 144 pols.	2 4 8	2 4 8	pols. 30	..	
Mundanthorai forests	Do.	Do.	,, 87	..	1 anna per pols.	5 7 0	5 7 0	,, 87	..	
Nángunéri Do.	Do.	Do.	,, 393	..	do.	24 9 0	24 9 0	,, 393	..	
Mandanthorai Do.	Do.	Dammer	,, 200	..	Rs. 1-12-0 per tolam.	3 8 0	3 8 0	,, 200	..	
	Do.	Nungu seeds	Meas. 538	..	1 anna per Meas.	33 10 0	33 10 0	Meas. 538	..	
		Tamarind fruit	Cotas. 2½	..	Rs 1-8-0 per coth.	3 12 0	3 12 0	Cotas. 2½	..	
		Rattan	lbs. 112	..	2 annas per 56 lbs.	0 4 0	0 4 0	lbs. 112	..	
		Thatching grass	,, 56	..	at 3 pies	0 0 3	0 0 3	,, 56	..	
		Total of I (*e*) ..	..	..	..	792 10 9	792 10 9	..	..	
		Total of the District ..	..	..	..	8,745 0 9	8,520 14 9	..	..	
North Malabar. Chedlet Begurnadri ..	I (*a*)	Teak	..	60,853	..	22,367 7 0	22,367 7 0	..	..	
Begur	Do.	Vengai	..	52	..	14 10 0	14 10 0	..	..	
	Do.	Miscellaneous	..	75	..	17 8 8	17 8 8	..	..	
		Total of I (*a*) ..	..	..	..	22,399 9 8	22,399 9 8	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
						Rs. A. P.	Rs. A. P.			
North Malabar —*cont.* Manantoddy ..	I (*e*)	Honey	..	lbs. 235	Rs. 0 3 0 per lb.	44 1 0	44 1 0	..	..	
	Do.	Cardamom	..	,, 368	27 per tolam of 32 lb.	310 8 0	310 8 0	..	..	
		Total of I (*e*) ..	..	..	..	354 9 0	354 9 0	..	..	
		Total of the District ..	..	..	..	22,754 2 8	22,754 2 8	..	..	
		Sold locally.								
Kanakut forests ..	I (*a*)	Blackwood	105	2,867	Rs. 12 8 0 per candy of 13 C. ft.	2,756 11 8	2,756 11 8	..	..	
	Do.	Miscellaneous	297	8,783	..	2,202 9 3	2,202 9 3	..	..	
Valuvasheri ..	Do.	Teak	5	65	Rs. 2 8 0	12 8 0	3,608 8 0	..	..	
	Do.	Blackwood	52	676	,, 2 8 0	130 0 0				
	Do.	Miscellaneous	1,577	20,501	,, 2 8 0	3,942 8 0				
Panangod forests ..	Do.	Do.	27	* 795	,, 2 12 0	26 10 6	168 2 10	..	..	* Includes 435 cubic feet, outstandings of previous year re-sold.
Pullyampully and Elival forests.	Do.	Blackwood	1	18	10 0 0 per 12½ C. ft.	14 6 5	14 6 5	..	..	
	Do.	Vengai	1	33	7 0 0	18 7 8	18 7 8	..	..	
	Do.	Miscellaneous	308	10,840	..	4,240 10 3	4,240 10 3	..	..	
		Sold from depôt.								
South Malabar. Kallai	Do.	Teak saplings	21,046	25,401⅛	..	29,632 5 7	29,632 5 7	..	..	
		Total of I (*a*) ..	..	..	..	42,976 13 4	42,641 13 8	..	..	
		Sold from depôt.								
Do.	I (*b*)	Firewood	† Tons. 12¼	C. ft. 1,700	..	60 12 0	60 12 0	..	..	† By book adjustment with Jail department.
		Sold from depôt.								
	I (*c*)	Bamboos	No. 8,621	..	Rs. 10 0 0 per 100.	862 1 7	862 1 7	..	..	
	Do.	Do. pieces	,, 179	..	1 8 0	2 11 0	2 11 0	..	..	
	Do.	Do. Kayikols	,, 66	..	0 8 0	0 5 3	0 5 3	..	..	
		Sold locally.								
Nilambúr River ..	Do.	Bamboos, whole	,, 62	..	8 0 0	4 15 4	4 15 4	..	..	
		Total ..	..	..	..	870 1 2	870 1 2	..	..	
		Add previous year's outstanding realized	..	..	..	..	261 0 0	..	..	
		Add as per Examiner's Accounts.	..	..	..	215 8 0	..	..	..	
		Total of I (*c*) ..	..	..	..	1,085 9 2	1,131 1 2	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally—cont.								
South Malabar—*cont.* Nilambúr Range—*cont.*	I (*e*)	Bees wax	..	lb. 346 or 13 $\frac{2}{12}$ mds.	Rs. A. P. 0 10 0 per lb.	Rs. A. P. 216 4 0	Rs. A. P. 216 4 0	..	..	
Pálghat	Do.	Do.	..	lb. 16 or $\frac{16}{25}$ mds.	..	8 5 4	8 5 4	..	..	
	Do.	Honey	..	12 seers.	0 10 0 per seer.	7 8 0	7 8 0	..	..	
	Do.	Cocoanut	560	..	..	8 1 6	8 1 6	..	..	
Nilambúr	Do.	Dammer	..	lb. 1,280 or 51 mds.	0 1 0	80 0 0	80 0 0	..	..	
Arimbarakuta forests.	Do.	Jack fruits	..	..	..	4 0 0	4 0 0	..	..	
		Total of I (*e*) ..	..	..	..	324 2 10	324 2 10	..	..	
		Total of the District ..	..	..	..	44,231 13 4	44,157 13 8	..	..	
		Sold from depôt.								
Mangalore	I (*a*)	Vengai	3	67 8	11 0 0 per 12¾ c. ft.	58 7 11	58 7 11	3	..	
	Do.	Miscellaneous	169	4,634 4	Different.	3,556 13 5	3,556 13 5	169	..	
	Do.	Ferry boats, large	1	..	250 0 0	250 0 0	250 0 0	1	..	
	Do.	Do. small	11	..	220 0 0	2,420 0 0	2,420 0 0	5		
		Sold locally.								
Coondapoor	Do.	Rosewood logs	1	21 ..	15 0 0 per 12¾ c. ft.	22 11 4	22 11 4	1	..	
	Do.	Miscellaneous	48	1,247 6	Different.	828 14 8	828 14 8	46	..	
South Canara. Judkal Coondapoor ..	Do.	Do.	1	20 8	Auction.	6 10 0	6 10 0	1		
	Do.	Top pieces of miscellaneous trees	2	14 3	Do.	11 8 0	11 8 0	4	..	
	Do.	Miscellaneous	2	48 6						
	Do.	Do. hollow	1	60 ..	Do	4 0 0	4 0 0	1	..	
	Do.	Do. trees	2	42 4	Do.	8 8 0	8 8 0	2	..	
Sarpadie Perla ..	Do.	Do. logs	1	36 5	13 8 0 per 12¾ c. ft.	990 9 1	990 9 1	47	..	
			46	1,316 ..	Different.					
Malalabidu (Uppinangadi range).	Do.	Top pieces of miscellaneous trees.	1	..	Auction.	4 0 0	4 0 0	2	..	
	Do.	Miscellaneous trees, hollow ..	1							
Parappar (Kásaragód).	Do.	Teak poles	26	..	Do.	0 13 0	0 13 0	26	..	
		Total of I (*a*) ..	..	..	..	8,162 15 5	8,162 15 5	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally.	Tons. lb.	..	Rs. A. P.	Rs. A. P.	Rs. A. P.	Tons. lb.	Tons. lb.	
Sabladi reserve (Coondapoor Range).	I (*b*)	Loppings	17 61	..	Auction.	70 11 3	70 11 3	17 61	..	
Sarpanamane forests.	Do.	Firewood	34 209	..	Rs. 4 a ton.	136 1 5	136 1 5	29 209	5 ..	
	Do.	Do.	.. 1,120	..	Auction.	1 11 0	1 11 0	.. 1,120	..	
			No.					No.		
Reserved Lands, Nos. 225 and 217.	Do.	Posts	25	..	..	12 3 0	12 3 0	25	..	
			Tons. Lb.					Tons. Lb		
Coondapoor	Do.	Charcoal	.. 112	..	Auction.	3 8 0	3 8 0	.. 112	..	
Mangalore	Do.	Do.	2 964	..	Do.	37 0 0	37 0 0	2 964	..	
Tannirbhavi plantation.	Do.	Twigs of casuarina	2 1.445	..	Do.	2 6 0	2 6 0	2 1,445	..	
Ullal plantation ..	Do.	Casuarina logs	29 1,252	..	Do.	155 0 0	155 0 0	29 1,252	..	
	Do.	Do. billets	59 1,344	..	Do.	250 0 0	250 0 0	59 1,344	..	
	Do.	Do. branches	7 404	..	Do.	23 0 0	23 0 0	7 404	..	
	Do.	Do. twigs	8 2,105	..	Do.	19 8 0	19 8 0	8 2,105	..	
	Do.	Do. stump	13 1,908	..	Do.	10 0 0	10 0 0	13 1,908	..	
	Do.	Do. roots and chips ..	6 1,431	..	Do.	20 0 0	20 0 0	6 1,431	..	
	Do.	Do. stakes	.. 1,792	..	Do.	2 8 0	2 8 0	.. 1,792	..	
	Do.	Calophylum Inophylum Billets	2 ..	..	Do.	5 8 0	5 8 0	2 ..	..	
	Do.	Do. Branches.	2 2,117	..	Do.	3 0 0	3 0 0	2 2,117	..	
South Canara—*cont.*		*Sold locally.*								
Poitaji reserve ..	Do.	1st-class billets	16 257	..	Do.	66 0 0	66 0 0	16 257	..	
Mangalore do. ..	Do.	Do. of Poitaji reserve ..	2 1,700	..	Do.	13 13 6	2 0 6	2 1,700	..	
Poitaji do. ..	Do.	2nd-class billets	10 1,792	..	Do.	22 0 0	22 0 0	10 1,792	..	
Mangalore do. ..	Do.	3rd-class firewood of Poitaji reserve.	11 560	..	Do.	83 10 6	83 10 6	11 560	..	
Kayerpalla do. ..	Do.	1st-class billets	29 804	..	Do.	115 8 0	115 8 0	29 804	..	
Mangalore do. ..	Do.	2nd-class do.	18 2,016	..	Do.	38 8 0	38 8 0	18 2,016	..	
		3rd-class firewood of Kayerpalla.	16 1,487	..	Do.	106 1 6	106 1 6	16 1,487	..	
		Total of I (*b*) ..	..	..	..	1,197 10 2	1,185 13 2	..	..	
		Sold locally.								
Coondapoor	I (*c*)	Myrabolams	20 1,792	..	..	636 15 5	636 15 5	20 1,792	..	
		Shige pods	11 1,932	..	..	929 1 7	929 1 7	11 1,932	..	
		Pepper	.. 203	..	..	80 11 4	80 11 4	.. 203	..	
		Nuxvomica seeds	.. 39	..	..	0 5 6	0 5 6	.. 39	..	
		Cinnamon flowers	6 1,369	..	..	2,122 1 10	2,122 1 10	6 1,369	..	
		Wax, 1st sort	.. 313	..	..	198 8 9	198 8 9	.. 313	..	
		Do. 2nd do.	.. 212	..	..	108 13 10	108 13 10	.. 212	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
		Sold locally—cont.	Tons lb.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Tons. lb.		
South Canara—*cont.* Coondapoor—*cont.*	I (*e*)	Honey	.. 402	..	..	71 15 3	71 15 3	.. 402	..	
		Deer horns	.. 367	..	..	58 11 4	58 11 4	.. 367	..	
		Wild nutmegs	4 1,876	..	..	390 0 10	390 0 10	4 1,876	..	
		Catechu	5 1,243	..	..	3,377 7 3	3,377 7 3	5 1,243	..	
		Myrabolams	5 1,598	..	..	176 15 8	176 15 8	5 1,598	..	
		Shige pods	7 2,103	..	..	653 0 2	653 0 2	7 2,103	..	
		Pepper	.. 35	..	..	11 12 0	11 12 0	.. 35	..	
		Nuxvomica seeds	.. 1,091	..	..	23 10 1	23 10 1	.. 1,091	..	
		Cinnamon flowers	1 167	..	..	302 13 0	302 13 0	1 167	..	
Udipi	Do.	Wax, 1st sort	.. 33	..	..	18 2 0	18 2 0	.. 33	..	
		Do. 2nd sort	.. 24	..	..	11 5 5	11 5 5	.. 24	..	
		Honey	.. 46	..	..	6 4 0	6 4 0	.. 46	..	
		Deer horns	.. 71	..	..	12 15 0	12 15 0	.. 71	..	
		Wild nutmegs	11 643	..	..	1,166 3 11	1,166 3 11	11 643	..	
		Cardamom	.. 6	..	..	7 9 0	7 9 0	.. 6	..	
		Myrabolams	1 2,099	..	..	74 4 2	74 4 2			
		Shige pods	8 988	..	..	668 6 0	668 6 0			
		Pepper	.. 15	..	..	5 10 4	5 10 4			
		Nuxvomica seeds	1 1,839	..	..	122 12 6	122 12 6			
		Cinnamon flowers	18 1,676	..	..	7,902 12 0	6,286 4 0			
		Wax, 2nd sort	.. 16	..	..	8 6 6	8 6 6			
		Honey	.. 104	..	..	15 1 9	15 1 9			
		Deer horns	.. 80	..	..	12 13 9	12 13 9			
Mangalore	Do.	Wild mace	54 1,231	..	..	30,517 6 7	30,517 6 7			
		Do. nutmeg	5 1,643	..	..	261 0 5	261 0 5			
		Bark of Terminalia Tomentosa.	1 1,750	..	..	16 12 0	16 12 0			
		Konde bark	1 665	..	..	64 13 6	64 13 6			
		Shige powder	.. 8	..	..	0 1 8	0 1 8	All.	..	
		Fruits of Calophylum Inophylum.	.. 113	..	..	2 13 0	2 13 0			
		Wood oil	.. 645	..	..	207 7 9	207 7 9			
Uppinangadi	Do.	Myrabolams	.. 629	..	..	12 5 6	12 5 6			
		Shige pods	25 1,886	..	..	1,831 1 6	1,831 1 6			
		Pepper	.. 141	..	..	53 6 6	53 6 6			
		Nuxvomica seeds	1 102	..	..	57 5 3	57 5 3			
		Wax, 1st sort	.. 14	..	..	7 12 6	7 12 6			
		Honey	.. 21	..	..	3 1 0	3 1 0			
		Deer horns	.. 59	..	..	7 13 0	7 13 0			
		Wild mace, spoiled	.. 91	..	..	21 15 5	21 15 5			
		Wild nutmeg	90 1,559	..	..	6,614 10 2	6,614 10 2			
		Resin (Vataria Malabarica)	.. 756	..	..	45 3 6	45 3 6			
		Guggul Dhup (a kind of Resin).	.. 28	..	..	1 1 0	1 1 0			

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved	Remarks.
		Sold locally—cont.								
South Canara—*cont.* Uppinangadi—*cont.* ..	I (*e*).	Canes called Nagapettas ..	No. 825	..	Rs. A. P. ..	Rs. A. P. 64 11 11	Rs. A P. 64 11 11	All.	..	
		Cardamons	Tons. lb. .. 18	..	..	27 0 0	27 0 0			
		Wood oil	.. 189	..	..	61 0 0	61 0 0			
		Nuxvomica seeds	.. 28	..	Auction.	0 14 6	0 14 6			
		Shige pods	.. 6	..		8 12 4	8 12 4			
		Myrabolams	.. 40	..		146 8 10	146 8 10			
Kásaragód Range ..	Do.	Shige pods	.. 266	..		7 8 10	7 8 10			
		Cinnamon flowers	.. 1,522	..		11 13 7	11 13 7			
		Deer horns	.. 47	..		452 6 5	452 6 5			
		Wild nutmeg	.. 402	..	37 0 0 per ton.					
		Kadshige bark	14 308	..						
		Total ..	..	..	..	59,682 8 10	58,066 0 10	..	..	
		Outstandings of previous year realized	..	..	..	..	1 0 0	..	..	
		Total of I (*e*) ..	..	..	..	59,682 8 10	58,067 0 10	..	..	
		Total of the District ..	..	..	..	69,043 2 5	67,415 13 5	..	..	
		Grand Total ..	..	..	..	2,52,808 6 2	2,48,243 15 11	..	..	

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

Depôt or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Quantity sold.	Rate.	Sold from depôt.	Sold from forest.	Number of logs and pieces, &c., removed.	Number sold but remaining unremoved.	Remarks.
						Rs. A. P.	Rs. A. P.			
....	I (*a*).	....	..	C. ft. 205,536	..	41,955 12 11	86,438 7 4	..	..	
	I (*b*).	....	..	,, 481,537	..	8,087 9 8	37,057 0 7			
	I (*c*).	....	..	No. 18,745	..	1,239 7 10	363 15 5			
	I (*d*).	....	..	C. ft. 1,653	..	10,547 8 9	16 2 0			
	I (*e*).	....	..	Mds. 31,610	..	3,092 2 11	64,010 2 9			
		Total ..	..	..	..	64,922 10 1	1,87,885 12 1	..	..	

			Abstract of amount realized.	
				Rs. A. P.
Grand Total of sales during the year both from depôt and forests ..	..	2,52,808 6 2	I (*a*).	1,27,846 7 8
Add outstandings due from previous year, as per form No. 66 ..	..	1,917 12 5	I (*b*).	42,707 8 8
			I (*c*).	1,648 15 3
			I (*d*).	10,563 10 9
			I (*e*).	65,477 5 7
Total ..	..	2,54,726 2 7	Total ..	2,48,243 15 11
Deduct amount realized during the year ..	..	2,48,243 15 11		..
Balance outstanding on 31st March 1889, as per form No. 66 ..	..	6,482 2 8		..

Districtwar Abstract of Form No. 71 showing Sales of Timber and other Produce both in the Depôt and the Forest during the year 1888-89.

District.	Timbers.						Firewood and charcoal.	Bamboos.	Sandalwood.	Minor produce.	Remarks.
	Teak.	Black or rosewood.	Vengai.	Other timbers.	Redwood roots.	Total timber.					
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	No.	C. ft.	Mds.	
Chingleput	..	..	..	6	..	6	52,384	..	..	..	*a* Estimate of 14 trees.
North Arcot	..	..	..	*a* 140	Tons 300= c. ft. 15,000	15,140	47,133	..	*e* 1,575	..	*b* Do. of 45 ,,
South Arcot	..	..	364	2,831	..	3,195	42,617	2	*e* 10	*f* 150	*c* Includes 2,400 cubic feet, estimate of 12 ferry boats.
Salem	13	..	4	929	..	946	10,529	424	*e* 68	..	*d* Includes No. 2,426, estimate of tons 12, lb. 291.
Trichinopoly	..	..	..	*b* 450	..	450	185,758	243	..	*g* 1,333	*e* Estimate at 53 cubic feet per ton.
Tanjore	..	..	..	..	..	..	160	..	..	..	*f* Includes 106 mds., estimate of No. 29,325.
North Coimbatore	..	..	..	..	..	..	..	..	..	..	*g* Do. 200 ,, ,, of 1,600 meas.
South Coimbatore	26,458	5,746	2,568	1,221	..	35,993	324	..	..	*h* 1,721	*h* Do. 269 ,, ,, of 1,192 meas.
Madura	513	..	2,579	186	..	3,281	82,900	..	..	569	and No. 40,435.
Tinnevelly	102	..	..	6,010	..	6,112	47,968	*d* 9,148	..	*i* 389	*i* Includes 379 mds., estimate of 2,998 meas.
North Malabar	60,853	..	52	75	..	60,980	..	..	..	24	and 2½ cotahs.
South Malabar	25,466	3,561	33	40,484	..	69,544	..	8,928	..	66	*j* Includes 2 mds., estimate of 825 canes.
South Canara	..	21	67	*c* 9,801	..	9,889	11,764	..	..	*j* 27,358	
Total ..	113,408	9,328	5,667	62,133	15,000	205,536	481,537	18,745	1,653	31,610	

ANNUAL FORM No. 72-A.

Forest Department, Madras, Southern Circle.

Timber and other Produce cut, collected and removed from the forests by consumers or purchasers, including pasture, during the year 1888-89.

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			RS.	RS.	
Chingleput ..	Classified timber	C. ft. 66,821	6,719	6,719	II (*a*).
	Firewood	Tons 5,639	11,779	11,779	II (*b*).
	Bamboos	Tons 151	390	390	II (*c*).
	Grazing fees	..	2,695	2,695	II (*d*).
	Leaves for manure	Tons 1,324	827	827	
	Stones and earth	,, 747	104	104	
	Rent on fruit trees	..	388	388	
	Do. on palmyra produce ..	..	85	85	
	Other minor produce	..	72	72	
	Cassia fistula bark	,, 7	51	51	
	Palmyra leaves	..	66	66	
	Avaram bark	..	721	721	
	Total ..	Tons 2,078	2,314	2,314	II (*e*).
	Total of district ..	..	23,897	23,897	
North Arcot ..	Classified timber	C. ft. 192,104	19,799	19,799	II(*a*)
	Firewood	Tons 25,931	40,390	40,390	
	Railway fuel	,, 11,315			
	Charcoal	,, 292	1,457	1,457	
	Add as per Examiner's Books.	..	77	..	
	Total ..	Tons 37,538	41,924	41,847	II (*b*).
	Bamboos	Tons 6,749	19,441	19,441	II (*c*).
	Grazing and fodder grass ..	..	3,318	3,318	II (*d*)
	Other minor produce	..	17,633	17,633	II (*e*)
	Total of district ..	..	1,02,115	1,02,038	
South Arcot ..	Classified timber	C. ft. 57,619	6,921	6,921	
	Casuarina do.	,, 34	10	10	
	Do. poles	,, (*a*) 28	9	9	(*a*) Estimate of 14 poles.
	Palmyra trees	,, (*b*) 6,650	675	675	(*b*) Do. of 665 trees.
	Miscellaneous trees	,, (*c*) 1,455	286	286	(*c*) Do. of 97 do.
	Total ..	C. ft. 65,786	7,901	7,901	II (*a*).
	Firewood	Tons 14,463	20,066	20,066	
	Do. transfers from land revenue miscellaneous to forests.	,, 547	388	388	
	Charcoal	,, 141	705	705	
	Miscellaneous trees	,, *43	82	82	* Estimate of 115 trees.
	Casuarina sticks, &c. ..	..	3	3	
	Total ..	Tons 15,194	21,244	21,244	II (*b*).
	Bamboos, split	Tons 73	366	366	
	Do. common	,, 243	609	609	
	Do. do.	No. 458	41	41	
	Do. lease	Tons *448	1,120	1,120	* Estimate, common bamboos.
	Total ..	Tons 764 No. 458	2,136	2,136	II (*c*).
	Fodder grass	..	35	1,930	
	Grazing fees	..	1,895		
	Total ..	..	1,930	1,930	II (*d*).

Timber and other Produce out, collected and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
South Arcot—*cont.*	Barks	Tons 62	7,851	7,851	
	Leaves	,, 3,433	2,206	2,206	
	Seeds	..	74	74	
	Fruits	..	576	576	
	Stones	,, 696	135	135	
	Tree rents	..	5,088	5,088	
	Other minor produce	,, 392	3,070	3,070	
	Transfers from land revenue miscellaneous to forest.	..	4,670	4,670	
	Total ..	Tons 4,583	23,670	23,670	II (*e*).
	Total of district ..	..	56,881	56,881	
Salem	Classified timber	C. ft. 247,404	21,305	21,305	II (*a*).
	Firewood	Tons 19,126½	13,784	13,784	In cubic feet, 765,060.
	Charcoal	,, 2,244	10,393	10,393	In maunds, 201,076.
	Total ..	Tons 21,370½	24,177	24,177	II (*b*).
	Bamboos, common	Tons 8,177	29,076	29,076	II (*c*).
	Do. split	,, 1,682			
	Grazing and fodder grass ..	..	5,272	5,257	II (*d*).
	Fruit trees	..	15,100	15,100	
	Palmyras	..	16,258	16,258	
	Minor produce contract ..	..	31,070	30,443	
	Tope produce	..	1,320	1,127	
	Leaves	..	87	87	
	Stones	..	3	3	
	Total ..	..	63,838	63,018	II (*e*).
	Total of district ..	..	1,43,668	1,42,833	
Trichinopoly ..	Classified timber	C. ft. * 101,983	7,290	7,290	II (*a*). * Includes 819 cubic feet, being estimate of 273 casuarina trees.
	Firewood	Tons 10,556	6,660	6,660	
	Charcoal	,, 56	279	279	
	Deduct as per Examiner's Books.	..	— 51	..	
	Total ..	Tons 10,612	6,888	6,939	II (*b*).
	Bamboos	Tons 1,708 and No. 2,662	4,695	4,695	II (*c*).
	Grass	..	6,001	5,893	
	Deduct as per Examiner's Books.	..	— 199	..	
	Total ..	..	5,802	5,893	II (*d*).
	Barks	Tons 3	2,737	1,865	
	Leaves for manure	,, 2,988	1,921	1,921	
	Other minor produce	..	4,433	3,662	
	Stones	..	48	48	
	Deducted by the Examiner ..	..	— 516	— 11	
	Total ..	Tons 2,991	8,623	7,485	II (*e*).
	Total of district ..	..	33,298	32,302	
Tanjore	Classified timber	C. ft. 4,613	361	361	II (*a*).
	Firewood	Tons 2,950	4,452	4,452	
	Charcoal	,, 39	188	188	
	Total ..	Tons 2,989	4,640	4,640	II (*b*).

Timber and other Produce cut, collected and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs	
Tanjore—*cont.* ..	Bamboos	Tons 97	234	234	II (*c*).
	Grazing fees	..	751	751	II (*d*).
	Minor produce	..	1,881	1,881	
	Leaves for manure	Tons 2,875	3,478	3,478	
	Deduct as per Examiner's Books.	..	— 8	..	
	Total ..	Tons 2,875	5,351	5,359	II (*e*).
	Total of district ..	..	11,337	11,345	
North Coimbatore.	Timber	C. ft. 43,736	6,270	6,270	II (*a*).
	Firewood	Tons 9,228	6,559	6,559	
	Charcoal	28	140	140	
	Total ..	Tons 9,256	6,699	6,699	II (*b*).
	Bamboos, plain	Tons 3,753	9,384	9,384	
	Do. split	376	1,880	1,880	
	Total ..	4,129	11,264	11,264	II (*c*).
	Grazing and fodder grass ..	..	23,336	23,336	II (*d*).
	Minor produce	..	8,375	8,375	
	Rent of topes, &c.	..	20,503	18,819	
	Total ..	..	28,878	27,194	II (*e*).
	Total of district ..	..	76,447	74,763	
South Coimbatore.	Timber, Miscellaneous ..	C. ft. 35,890	3,103	3,103	(*a*) Estimate of No. 1357.
	Posts, poles and ploughs ..	(*a*) 1,336	475	475	(*b*) Do. 1024 cart loads.
	Spokes and felloes	(*b*) 20,480	2,229	2,229	
	Transfer from land revenue by Accountant-General.	..	223	223	
	Total ..	57,706	6,030	6,030	II (*a*).
	Firewood	Tons 12,826	8,425	8,425	
	Charcoal	154	775	775	
	Billet-wood, faggot-wood, &c.	3,751	2,168	2,168	
	Poramboke trees	..	2,529	2,529	
	Total ..	16,731	13,897	13,897	II (*b*).
	Bamboos	No. 998,118	6,729	6,729	
	Do contract	Tons 375	716	716	
	Total ..	998,493	7,445	7,445	II (*c*).
	Grazing fees	..	6,073	6,073	
	Grass	..	268	268	
	Add as per Examiner's Books.	..	11	..	
	Total ..	..	6,352	6,341	II (*d*).
	Minor produce	..	6,217	6,217	II (*e*).
	Total of district ..	..	39,941	39,930	
Madura ..	Vengai	C ft. 1,241	451	451	
	Junglewood	405,820	14,944	14,944	
	Miscellaneous timbers ..	1,176	204	204	
	Amount paid by Karuvela tree contractors.	..	6,343	6,343	
	Add as per Examiner's Books.	..	248	..	
	Total ..	408,237	22,190	21,942	II (*a*).
	Firewood	Tons 7,782	6,199	6,199	
	Charcoal	,, 226	1,135	1,135	
	Total ..	Tons 8,008	7,334	7,334	II (*b*).

Timber and other Produce cut, collected and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
Madura—*cont.*	Bamboos	Tons 1,035	3,225	3,225	II (*e*).
	Grazing fees	..	2,462	2,462	II (*d*).
	Stones	Tons 1,947	417	417	
	Manure leaves	,, 298	191	191	
	Barks	..	1	1	
	Tree tax	..	1,832	1,832	
	Cardamom assessment	..	708	708	
	Minor produce contract ..	..	30,216	30,216	
	Other minor produce	,, 274	315	315	
	Fruits	..	242	242	
	Amount of loss recovered from Permit Issuing officer.	..	124	124	
	Particulars not known .	..	1	1	
	Deduct as per Examiner's Books.	..	— 1,282	..	
	Total ..	Tons 2,519	32,765	34,047	II (*e*).
	Total of the district ..	..	67,976	69,010	
Tinnevelly ..	Classified trees	C. ft. 36,672	3,440	3,415	
	Teak	,, 810	394	394	
	Miscellaneous timber	,, 2,442	1,179	1,179	
	Vengai	,, 46	12	12	
	Added by the Examiner ..	..	9	10	
	Total ..	C. ft. 39,970	5,034	5,010	II (*a*).
	Firewood	Tons 11,518	27,592	26,617	
	Charcoal	,, 524	2,736	2,736	
	Outstandings of previous year realized.	..	..	2	
	Total ..	Tons 12,042	30,328	29,355	II (*b*).
	Bamboos, &c.	Tons 117	511	510	II (*e*).
	Grazing fees and fodder grass .	..	312	312	II (*d*).
	Minor produce	..	18,176	17,678	
	Outstandings of previous year realized.	..	..	421	
	Total ..	..	18,176	18,099	II (*e*).
	Total of the district ..	..	54,361	53,286	
North Malabar ..	Teak pieces	C. ft. 3,488	494	494	
	Miscellaneous trees	,, * 1,440	870	870	* Estimate of 96 trees.
	Valuation of standing trees on lands applied for by planters.	..	750	750	
	Advance for timber	..	1,557	1,557	
	Total ..	C. ft. 4,928	3,671	3,671	II (*a*).
	Bamboos	No. 19,611	296	296	II (*e*).
	Amount of minor produce contract.	..	3,919	2,528	II (*e*).
	Total of the district ..	..	7,886	6,495	
South Malabar ..	Teak	C. ft. 46	39	39	
	Miscellaneous timber	(*a*) C. ft. 15,480	2,325	2,371	(*a*) Includes 1,900 cubic feet being estimate of 190 trees.
	Teak poles and scantlings ..	(*b*) ,, 572	547	547	(*b*) Estimate of 5,725 poles, scantlings, &c.
	Total ..	,, 16,098	2,911	2,957	II (*a*).
	Firewood	Tons 5,498	2,992	2,992	
	Charcoal	,, 69	172	172	
	Total ..	Tons 5,567	3,164	3,164	II (*b*).

Timber and other Produce cut, collected and removed from the forests, &c.—*cont.*

District.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	Number or quantity.			
South Malabar—*cont.*	Bamboos	No. 99,760	Rs. 898	Rs. 928	
	Deduct as per Examiner's Books.	..	— 216	..	
	Total ..	..	682	928	II (*e*).
	Grass	..	101	101	II (*d*).
	Minor produce	..	32	32	II (*e*).
	Total of the district ..	..	6,890	7,182	
South Canara ..	Reserved, classified and other trees.	C. ft. 445	240	240	
	Do. do. ..	,, * 9,840	3,139	3,139	* Estimate of 656 trees.
	Total ..	C. ft. 10,285	3,379	3,379	II (*a*).
	Firewood, &c.	Tons 6,867	5,151	5,151	
	Charcoal	,, 46	138	138	
	Total ..	Tons 6,913	5,289	5,289	II (*b*).
	Bamboos	No. 58,006	919	919	II (*c*).
	Leaves	Tons 16	8	8	
	Thatching grass, &c.	..	7	7	
	Rent of cardamom forest ..	..	866	866	
	Total ..	16	881	881	II (*e*).
	Total of the district ..	..	10,468	10,468	
	Total of all districts in the Southern Circle.	..	6,35,165	6,30,430	

Abstract of Form No. 72-A.

District.	Timber.	Firewood.	Railway fuel.	Charcoal.	Total in cub. ft.	Bamboos. Tons.	Bamboos. Number.	Minor produce.
	C. FT.	TONS.	TONS.	TONS.		TONS.	NO.	TONS.
Chingleput ..	66,821	5,639	..	..	225,560	151	..	2,078
North Arcot ..	192,104	25,931	11,315	292	1,923,460	6,749	..	..
South Arcot ..	65,786	15,053	..	141	658,520	764	458	4,583
Salem	247,404	19,126½	..	2,244	1,662,660	9,859	..	..
Trichinopoly ..	101,983	10,556	..	56	444,640	1,708	2,662	2,991
Tanjore	4,613	2,950	..	39	133,600	97	..	2,875
North Coimbatore.	43,736	9,228	..	28	380,320	4,129	..	..
South do. ..	57,706	16,577	..	154	724,680	375	998,118	..
Madura	408,237	7,782	..	226	401,680	1,035	..	2,519
Tinnevelly ..	39,370	11,518	..	524	670,320	117	..	..
North Malabar ..	4,928	..	..	..	..	..	19,611	..
South do. ..	16,098	5,498	..	69	247,520	..	99,760	..
South Canara ..	10,285	6,867	..	46	293,080	..	58,006	16
Total Tons..	..	136,725½	11,315	3,819×10 / Firewood. = 38,190	..	24,984		15,062
						No. =4,996,800	1,178,615	
Total Equivalent in cubic feet ..	1,259,671	5,469,020	769,420	1,527,600	7,766,040	No. = 6,175,415		mds. =1,349,555

	Sales. Rs.	Actually realized. Rs.
II (*a*) Timber	1,12,860	1,12,634
II (*b*) Firewood and Charcoal	1,77,363	1,76,364
II (*c*) Bamboos	80,314	80,559
II (*d*) Grazing and fodder grass	52,331	52,396
II (*e*) Grass and other minor produce	2,12,297	2,08,477
Total ..	6,35,165	6,30,430
Add outstandings due from previous year as per form No. 66	7,704	
Total ..	6,42,869	
Deduct amount realized during the year	6,30,430	
Balance outstanding on 31st March 1889 as per form No. 66	12,439	

ANNUAL FORM No. 72-B.

Forest Department, Madras, Southern Circle.

Timber and other Produce confiscated and sold during the year 1888-89.

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			RS.	RS.	
Chingleput ..	Junglewood	C. ft. 560 (*a*)	22	22	(*a*) Estimate of 14 tons.
		TONS.			
	Firewood	,, 5	11	11	
	Charcoal	,, 2	8	8	
	Minor produce	..	1	1	
	Total ..	..	42	42	III.
North Arcot ..	Junglewood	C. ft. 280 (*b*)	195	195	(*b*) Estimate of 13 cart loads, 2 head loads and 9 posts.
		TONS.			
	Firewood	,, 8 (*c*)	27	27	(*c*) Includes estimate of 6 cart loads, 24 head loads, and 5 ass loads.
	Charcoal	,, 1 (*d*)	4	4	(*d*) Estimate of 38 head loads.
	Bamboos	,, 5 (*e*)	80	80	(*e*) Estimate of 9½ cart loads, 2 head loads, and No. 8.
	Minor produce	,, 9 (*f*)	17	17	(*f*) Estimate of 14 cart loads, 22 head loads, No. 138, and 1 bundle.
	Total ..	..	323	323	III.
South Arcot ..	Timber	C ft. 436 (*g*)	90	90	(*g*) Includes 312 C. ft., estimate of 78 poles.
		TONS.			
	Firewood	,, 87 (*h*)	133	133	(*h*) Includes 1 tree and 2 planks.
	Charcoal	..	1	1	
	Bamboos	..	1	1	
	Sandalwood billets ..	..	4	4	
	Minor produce	..	36	36	
	Total ..	..	265	265	III.
Salem	Timber	C. ft. 1,492	336	336	
		TONS.			
	Firewood	,, 49 (*i*)	131	131	(*i*) Includes 1,952 C ft.
	Charcoal	,, 5	62	62	
	Bamboos	,, 29	224	224	
	Sandalwood	..	19	19	
	Minor produce	,, 7	11	11	
	Total ..	..	783	783	III.
Trichinopoly ..	Timber	C. ft. 174 (*j*)	13	13	(*j*) Includes 10 C. ft., being estimate of one tree.
		TONS.			
	Firewood	,, 23	25	25	
	Bamboos	,, 4	57	57	
	Minor produce	..	60	60	
	Total ..	..	155	155	III.
Tanjore	Timber	C. ft. 11	2	2	
		TONS.			
	Sea drift and waifwood ..	,, 230 (*k*)	11	11	(*k*) Estimate of 23 trees.
	Firewood	,, 2	8	8	
	Minor produce	,, 2	3	3	
	Total ..	..	24	24	III.
North Coimbatore.	Timber	C. ft 113 (*l*)	36	36	(*l*) Includes estimate of 2 logs of blackwood and one miscellaneous timber.
		TONS.			
	Firewood	,, 1	2	2	
	Charcoal	..	1	1	
	Bamboos	,, 1	11	11	
	Minor produce	,, 1	14	14	
	Total ..	..	64	64	III.

Timber and other Produce confiscated and sold during the year 1888-89—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
South Coimbatore.	Teak scantlings	C. ft. 12 (*m*)	3	3	(*m*) Estimate of 9 scantlings.
	Rosewood	,, 9	7	7	
	Miscellaneous timber	,, 150	36	36	
		TONS.			
	Firewood	,, 2	45	45	
	Bamboos	..	2	2	
	Minor produce	..	10	10	
	Total	..	103	103	III.
Madura	Teak	C. ft. 213	185	185	
	Vengai	,, 580	623	623	
	Junglewood	,, 1,210	109	109	
	Miscellaneous wood	,, 513	49	49	
		TONS.			
	Firewood	,, 9	23	23	
	Bamboos	,, 1	5	5	
	Minor produce	,, 5	28	28	
	Total	..	1,022	1,022	III.
Tinnevelly	Teak	C. ft. 102	24	24	
	Junglewood	,, 231	79	79	
	Miscellaneous wood	,, 10 (*n*)	1	1	(*n*) Estimate of one tree.
		TONS.			
	Firewood	,, 68	171	171	
	Charcoal	,, 1	8	·8	
	Minor produce	,, 20	25	25	
	Total	..	308	308	III.
North Malabar		*Nil.*			
South Malabar	Teak sapling and firewood	..	1	1	
	Minor produce (Elephant tusk, &c.)	..	280	280	
	Total	..	281	281	III.
South Canara	Teak trees	C. ft. 45 (*o*)	363	363	(*o*) Estimate of 3 trees.
	Rosewood	,, 231 (*p*)			(*p*) Estimate of 12 trees, 3 logs and 6 pieces.
	Vengai	,, 30 (*q*)			(*q*) Estimate of 2 trees.
	Miscellaneous timber	,, 500 (*r*)			(*r*) Estimate of 49 trees and 73 pieces.
	Firewood	..			
	Minor produce	..			
	Total	..	363	363	III.
	Grand Total	..	3,733	3,733	III.

Abstract of Form No. 72-B.

District.	Timber.	Firewood.		Bamboos.	Minor produce.
		Firewood.	Charcoal.		
	C. FT.	TONS.	TONS.	TONS.	TONS.
Chinglepat	560	5	2	..	..
North Arcot	280	8	1	5	9
South Arcot	436	87	..	..	..
Salem	1,492	49	5	29	7
Trichinopoly	174	23	..	4	..
Tanjore	241	2	..	..	2
North Coimbatore	113	1	..	1	1
South Coimbatore	171	2	..	..	..
Madura	2,525	9	..	1	5
Tinnevelly	343	68	1	..	20
North Malabar	..	..	..	..	..
South Malabar	..	..	..	..	..
South Canara	806	..	..	..	..
Total	..	254 = C. ft. 10,160	9 = Firewood, C. ft. 3,600	40 =	44 =
Grand Total	7,141	C. ft. 13,760		No. 8,000	Mds. 3,942

ANNUAL FORM No. 73-A.

Forest Department, Madras, Southern Circle.

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1888-89.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Chingleput	....				Nil.					
North Arcot ..	Redwood roots and stumps	Tons. 326	lb. ..	4,890	Tons. 385	lb. ..	5,775	885	..	
	Babul, &c., wood	166	319¼	332	11	100¾	22	..	310	
	Sandalwood and roots	32	506	2,578	16	779	1,308	..	1,270	
	Total ..	524	825¼	7,800	412	879¼	7,105	..	695	
South Arcot ..	Vengai	No. ..	C. ft. ..	..	No. 4	C. ft. 15 0	15	15	..	
	Miscellaneous timber	6	24 11	.6	98	67 1	34	28	..	
	Firewood	Tons. 5	lb. 1,022	30	Tons. 2	lbs. 8	10	..	20	
	Sandalwood roots and billets	1	2,215	500	1	1,582	528	28	..	
	Wax	..	4	1	..	..	..	..	1	
	Total ..	6 C. ft. 24 11	Tons. lb. 7 1,001	537	102 C. ft. 82 1	Tons. lb. 3 1,590	587	50	..	
Salem ..	Teak	No. 2	C. ft. 4 4	4	No. ..	C. ft. ..	..	..	4	
	Vengal	2	3 11	5	..	..	..	..	5	
	Miscellaneous timber	2	3 1	4	9	85	85	81	..	
	Bamboos	..	..	..	1,000	..	15	15	..	
	Sandalwood roots and billets	Tons. 1	lb. 672	522	Tons. 12	lb. 1,302	3,975	3,453	..	
	Total ..	No. 6 Tons lb. 1 672	11 4	535	No. 9 1,000 Ts. lb. 12 1,302	85	4,075	3,540	..	
Trichinopoly ..	Firewood	Tons. 80	..	240	Tons. 40	..	145	..	95	

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1888-89—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Tanjore	.... ..	*Nil.*								
North Coimbatore ..	Sandalwood	Tons. ..	lb. 1,681	234	Tons. ..	lb. 1,823	190	..	44	
South Coimbatore ..	Teak logs and rafters	No. 1,060	C. ft. 32,075	22,607	No. 540	C. ft. 18,592	13,759	..	8,848	
	Miscellaneous timber	..	..	..	4	113	56	56	..	
	Minor produce	..	..	5	..	..	..	..	5	
	Total ..	1,060	32,075	22,612	544	18,705	13,815	..	8,797	
Madura	Firewood	Tons. 176	lb. 610	550	Tons. 60	lb. 1,711	228	..	322	
Tinnevelly ..	Kongu poles	No. 14	C. ft. 18	18	No. 4	C. ft. 21	21	3	..	
	Bamboo pattais	Tons. 4	lb. 2,025	129	..	..	..	..	129	
	Minor produce	..	..	..	Tons 1	lb. 110	902	902	..	
	Total ..	No 14 / Tons. 4	C. ft. 18 / lb. 2,025	147	No. 4 / Tons. 1	C. ft. 21 / lb. 110	923	776	..	
North Malabar ..	.... ..	*Nil.*								
	Selection felling.									
South Malabar	Miscellaneous timber	No. 20	C. ft. 200	125	No. 30	C. ft. 1,234	770	645	..	

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1888-89—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year	Against the year.	
	Clearance felling.			Rs.			Rs.	Rs.	Rs.	
South Malabar—*cont.*	Teak saplings, large, small, and classified ..	16,659	15,703	21,000	20,709	17,087	22,000	1,000	..	
	Kariyas	36	..	..	2,031	..	50	50	..	
	Bamboos	..	..	..	5,409	..	400	400	..	
	Minor produce	..	..	..	..	lb. 250	100	100	..	
	Total ..	16,679 / 36	C. ft. 15,903	21,125	20,739 No. / 7,440 and lb. / 250	1,8321	23,320	2,195	..	
South Canara ..	Rosewood logs	..	..	..	2	72·9	80	80	..	
	Miscellaneous timber	..	..	..	91	2,161·4	1,825	1,825	..	
	Total ..	..	..	..	93	2,234·3	1,905	1,905	..	
	Grand Total.									
	Teak	No. 17,721	C. ft. 47,782	43,611	No. 21,249	C. ft. 35,679	35,759	..	7,852	
	Vengai	2	4	5	4	15	15	10	..	
	Rosewood	..	..	..	2	72 9	80	80	..	
	Miscellaneous timber	42	246	153	236	3,681 5	2,791	2,638	..	C. ft.
	Redwood roots	Tons 326	lb. ..	4,890	Tons. (a) 385	lb. ..	5,775	885	..	(a)=19,250, Estimate.
	Firewood	429	..	1,152	(b) 113 / No. 2,031	1,819 / ..	452	..	700	(b)=24,863 Do.
	Bamboos	5	..	129	,, 6,409	..	415	286	..	(c)= 1,573 Do.
	Sandalwood roots and billets	36	..	3,834	(c) 31	(c) 1,006	6,001	2,167	..	(d)=104 Mds Do.
	Minor produce	..	4	6	(d) 1	(d) 360	1,002	996	..	
	Total ..	..	..	53,780	..	..	52,290	..	1,490	

ANNUAL FORM No. 73-B.

Forest Department, Madras, Southern Circle.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1888-89.

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.	
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.
			Rs.		Rs.	Rs.	Rs.
Chingleput ..	Surveying instruments	17	325	19	329	4	..
	Tools	143	383	197	478	95	..
	Furniture	26	293	26	293	..	..
	Buildings	2	240	3	425	185	..
	Total ..	188	1,241	245	1,525	284	..
North Arcot ..	Surveying instruments	34	809	34	832	23	..
	Machinery	2	53	2	(a) 9,893	9,840	..
	Tools	678 Cwt. 32-94	1,154	789 Cwt. 32-94	1,222	68	..
	Furniture	85	507	85	483	..	24
	Buildings	40	3,711	40	3,516	..	195
	Total ..	839 Cwt. 32-94	6,234	950 Cwt. 32-94	15,946	9,712	..
South Arcot ..	Surveying instruments	17	605	67	1,274	669	..
	Machinery	7	271	7	271	..	..
	Tools	514	293	524	302	9	..
	Furniture	158	988	158	988	..	..
	Miscellaneous	421	1,141	432	1,386	245	..
	Buildings	9	2,865	10	3,865	1,000	..
	Live-stock	2	20	..	..	..	20
	Total ..	1,128	6,183	1,198	8,086	1,903	..
Salem	Surveying and other instruments	47	966	46	558	..	(b) 408
	Tools	197	820	209	884	64	..
	Furniture	16	115	16	115	..	..
	Miscellaneous	7	28	7	28	..	..
	Buildings	3	75	3	75	..	..
	Total ..	270	2,004	281	1,660	..	— 344
Trichinopoly ..	Surveying and other instruments	6	325	6	325	..	..
	Tools	724	809	1,141	1,222	413	..
	Furniture	45	352	61	480	128	..
	Buildings	13	1,615	9	1,555	..	60
	Miscellaneous	133	549	222	609	60	..
	Live-stock	20	537	12	537	..	..
	Total ..	941	4,187	1,451	4,728	541	..
Tanjore ..	Surveying and other instruments	19	..	20	..	..	..
	Tools	213	16	155	16	..	..
	Furniture	20	..	20	..	..	..
	Miscellaneous	21	17	21	17	..	..
	Buildings	4	323	4	323	..	..
	Total ..	277	356	220	356	..	..
North Coimbatore	Surveying and other instruments	14	55	14	55	..	..
	Tools	997	991	1,012	1,256	265	..
	Furniture	183	190	183	190	..	..
	Buildings	35	3,645	33	2,750	..	895
	Total ..	1,229	4,881	1,242	4,251	..	630

(a) Includes Rs. 9,842, cost of Tramway materials.
(b) Value of one Theodolite sent to South Coimbatore.

Abstract showing the value of Live-stock, Stores, Tools and Plant, &c.—*cont.*

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.	
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.
			Rs.		Rs.	Rs.	Rs.
South Coimbatore	Surveying and other instruments	39	59	49	59	..	..
	Machinery	..	..	..	* 42,447	42,447	..
	Tools	381	..	528	..	..	..
	Furniture	152	24	206	49	25	..
	Miscellaneous	7	..	37	..	..	..
	Buildings	29	157	36	157	..	..
	Live-stock	...	..	4	7,700	7,700	..
	Total	608	240	860	50,412	50,172	..
Madura	Surveying and other instruments	22	491	23	491	..	..
	Machinery	1	18	..	..	..	18
	Tools	103	387	146	387	..	..
	Furniture	81	183	112	432	249	..
	Buildings	66	3,772	82	4,982	1,210	..
	Live-stock	6	120	6	120	..	..
	Total	279	4,971	369	6,412	1,441	..
Tinnevelly	Surveying and other instruments	27	548	33	755	207	..
	Tools	262	436	307	511	75	..
	Furniture	269	1,405	277	1,469	64	..
	Buildings	67	5,372	74	7,682	2,310	..
	Total	625	7,761	691	10,417	2,656	..
North Malabar	Surveying and other instruments	33	407	33	407	..	..
	Tools	13	194	35	194	..	..
	Furniture	2	1	2	1	..	..
	Miscellaneous	27	220	27	220	..	..
	Live-stock	11	14,192	3	4,500	..	9,692
	Buildings	8	1,567	8	1,567	...	..
	Total	94	16,581	108	6,889	..	9,692
South Malabar	Surveying and other instruments	13	304	11	* 198	..	106
	Machinery	18	90	19	99	9	..
	Tools	641	335	814	483	148	..
	Furniture	38	149	38	149	..	..
	Buildings	17	5,128	19	13,407	8,279	..
	Miscellaneous	164	596	168	747	151	..
	Building materials	10,000	126	..	...	..	126
	Live-stock	12	4,002	8	6,702	2,700	..
	Total	10,903	10,730	1,077	21,785	11,055	..
South Canara	Surveying and other instruments.	43	..	40	..	..	..
	Tools	369	..	419	..	..	..
	Machinery	1	..	1	..	..	..
	Furniture	90	..	98	..	..	..
	Buildings	15	170	17	170	..	..
	Miscellaneous	256	..	237	..	..	..
	Total	774	170	812	170	..	..
Grand Total	Surveying and other instruments	331	4,894	395	5,283	389	..
	Tools	5,235 Cwt. 32-94	5,818	6,270 Cwt. 32-94	6,955	1,137	..
	Machinery	29	432	29	52,710	52,278	..
	Furniture	1,165	4,207	1,282	4,649	442	..
	Buildings	308	28,664	338	40,474	11,810	..
	Building materials	10,000	126	..	..	..	126
	Live-stock	51	18,871	33	19,559	688	..
	Miscellaneous	1,036	2,551	1,151	3,007	456	..
	Total	18,155 Cwt. 32-94	65,563	9,504 Cwt. 32-94	1,32,637	67,074	..

* Cost of Tramway materials.

Annual Form No. 74.

Forest Department, Madras.

Statement of Elephants in the Southern Circle during the year 1888-89.

Part I.

Elephants in possession of the reporting officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep including servants and food.				Remarks.
	Elephants.			Rs.	A.	P.	
South Coimbatore.	....	*Nil.*					
North Malabar ..	1. Phyllis	Purchased in 1878.	Per head ..	27	0	0	
	2. Lakshmi	Transferred from Anaimalai in May 1881.					
South Malabar ..	1. Vixen	Transferred from Wynaad in 1882.	Do. ..	27	0	0	
	2. Peyru	Transferred from Wynaad in 1882.					
	3. Sampson	Purchased from Mr. Morgan in 1884.					
	4. Eva	Purchased from Mr. Morgan in 1884.					
	5. Juno	Captured in February 1886.					
	6. Jupiter	Captured in July 1887 ..					
	7. Theebaw	Captured in January 1886.					
	8. Mars	Captured in July 1887 ..					
	Other Cattle.						
South Arcot ..	....	*Nil.*					
Trichinopoly ..	Eleven bullocks ..	April 1885 and 1886 ..	Per head ..	6	0	0	
Madura .. — ..	1. Two Kodaikánal depôt bulls.	Purchased in 1885 ..	Per head ..	10	0	0	
	2. Two Navinipatti garden bulls.	Purchased in 1886 ..					
	3. Two ponies for Kodaikánal depôt.	Purchased in 1887 ..					
North Malabar ..	....	*Nil.*					

Part II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	Rs. A. P.	Remarks.
	Elephants.				
South Coimbatore.	1. Sankara	Purchased in January 1878	Per head ..	32 0 0	1. Transferred from Anaimalais to North Malabar in May 1881, and thence to South Coimbatore in June 1888.
	2. Chloe				2. Transferred from North Malabar in June 1888.
	3. Parvathi ..	Purchased in 1888 ..			3. Transferred from South Malabar in August 1888.
	4. Karthainee ..				4. Do. Do.
North Malabar.	1. Not named ..	Captured in the Government Pit at Trans Beni in April 1888.	Per head ..	9 0 0	
	2. Nur Johan ..				
	3. Leila				
South Malabar.	1. Rani	Captured in June 1885 in North Malabar.	Per head ..	27 0 0	1. Transferred from North Malabar in September 1888.
	2. Maharaja ..	Captured in 1886-87 in North Malabar.			2. Do. do.
	3. Jumboo	Captured in 1886-87 in North Malabar			3. Do. do.
	4. Gordon	Captured 11th February, 1889.			
	Other Cattle.				
South Arcot ..	....	*Nil.*			
Trichinopoly ..	One Bullock ..	March 1889	Per head ..	6 0 0	
Madura ..	....	*Nil.*			
North Malabar.	....	*Nil*			

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	Rs. A. P.	How disposed of.
	Elephants.				
South Coimbatore..	....	*Nil.*			
North Malabar ..	1. Not named	....	..	..	Died in May 1888.
	2. Nur Jehan	....	..	..	Do. in March 1889.
	3. Chloe	Transferred to South Coimbatore in June 1888	Per head	27 0 0	
	4. Sankara				
	5. Mahraja	Transferred to South Malabar in September 1888.			
	6. Jumboo				
	7. Rani				
South Malabar ..	1. Parvathi	Purchased on account of Coimbatore district in May 1888.			1 and 2 were sent to South Coimbatore in July 1888.
	2. Karthainee				
	3. Lucy	Captured in February 1886	Do. ..	27 0 0	Died in November 1888.
	4. W. Juno	Purchased in December 1886.			Do. in October 1888.
	Other Cattle.				
South Arcot ..	1. Vellian buffalo ..	Purchased in November 1885.	Do. ..	1 0 0	Sold for Rs. 34.
	2. Karuppan do. ..				
	One bullock	April 1886.	Do. ..	7 0 0	One died in September 1888.
Madura	....	*Nil.*			
North Malabar ..	Four Coorg buffaloes ..	Purchased in 1884 and 1885.	Do. ..	2 0 0	Sold for Rs. 130 in September 1888.

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE NORTHERN CIRCLE, MADRAS,

FOR THE YEAR 1888-89.

By J. S. GAMBLE, Esq., Conservator of Forests.

CHAPTER I.

Introductory Remarks.

As in previous years, Forest Settlement has been the chief work of the year 1888-89. But the staff had also other works of importance to attend to in demarcation, the making of roads, the building of houses for the staff, the protection of the forests from fire and the improvement of the revenue collections.

2. From 1st April 1888 to 6th January 1889 the Circle was under the charge of Mr. A. W. Peet, Acting Conservator. From 7th January to the end of the year the permanent Conservator, Mr. J. S. Gamble, held charge. Mr. Peet visited the districts of Cuddapah, Kurnool, Bellary, Anantapur and Nílgiris and was seventy-six days on tour away from Madras or Ootacamund. Mr. Gamble, after assuming charge, visited Nellore, Cuddapah, Kurnool, Bellary, Anantapur and Nílgiris and conferred with the Collectors and District Forest-officers as to works in progress. He was thirty-five days on tour. If only the Circles could be revised, so as to make three instead of two, as proposed recently by the Madras Government, it would be a very great advantage, for the Conservator could then make his inspections in more detail than is possible under present circumstances.

3. The following list shows the time spent in camp by the various officers in charge of Districts :—

District.	Officer in charge.	Time in charge.	Days in camp.
Ganjam	Mr. A. W. Lushington, Assistant Conservator of Forests	365	214
Vizagapatam ..	Charge held { Northern Division by Assistant Conservator, Ganjam. Southern do. by do. Godávari.	..	..
Godávari		..	..
Kistna	Mr. J. S. Battie, Assistant Conservator of Forests	365	182
Nellore	„ G. Homfray, do. do.	365	197
	„ J. H. B. Brougham, Deputy Conservator of Forests	365	114
Cuddapah	„ F. A. Lodge, Assistant Conservator of Forests	325	194
	Collector	7	..
	Mr. T. G. A. Gaudoin, Forest Ranger	33	25
Kurnool	„ E. D. M. Hooper, Deputy Conservator of Forests	49	7
	„ P. M. Lushington, Assistant Conservator of Forests	316	149
Bellary	„ H. H. Ward, Forest Ranger	94	27
	„ W. Carroll, Sub-Assistant Conservator of Forests..	271	112
Anantapur	T. Somasundra Mudaliyar, Sub-Assistant Conservator of Forests ..	365	339
Nilgiris	Mr. P. M. Lushington, Assistant Conservator of Forests	46	..
	T. M. Nallasawmy Naidu, Sub-Assistant Conservator of Forests ..	319	200

All officers spent good time in camp, except Mr. Brougham in Nellore and the officers in Bellary. But in both cases those officers had to spend much time at head-quarters in attendance on the Courts of Forest Settlement. The Collector of Nellore (Mr. C. D. Macleane) says that "what with (*a*) absence of higher subordinates, (*b*) settlement being in full play with the occurrence of some difficult cases, (*c*) very numerous questions arising in lands outside reserved forests, the year was one of hard work for the District Forest-officer." The Conservator can only add that the same remarks may be made applicable to almost all districts; and most so to Cuddapah, Kurnool and Anantapur.

CHAPTER II.

Area and Boundaries.

4. Form 59-A gives the area of reserved forests. It is strange to record that there is but an increase of 6 square miles, for though there were additions of 9½ square miles in Ganjam, 14 in Vizagapatam, 11 in Godávari, 6 in Kistna and 3 in Nellore, yet these 43½ square miles were counterbalanced by the necessity of striking off 35 square miles in Nellore and rectifying mistakes leading to a reduction of 2½ square miles in Nílgiris. How the area of the Dugarázpatnam plantation reserve came to be entered as 37 (!) square miles last year is not clear. To the 631 square miles of reserved forests under Act V of 1882 at the close of the year, must be added 23 square miles of reserved forest set apart by the Collector of Vizagapatam in the Pálkonda hills, which are Agency tracts to which that Act has not yet been extended. It is also proposed to reserve 130 square miles in Golgonda Agency.

5. As will be explained further on, the area—631 square miles—does not take into consideration the large area of 3,199 square miles which have been finally settled but not yet notified officially.

6. Form 59-B need no longer be submitted as all the areas described in it have, as pointed out recently by Government, either been transferred to 59-A, or are proposed for reservation and as such are at present reserved lands in form 59-C.

7. Form 59-C has been corrected as regards the contents of several areas. Several areas have been transferred to form 59-A and some new additions have been brought on to the list, so that the area of reserved lands was 6,424 square miles on the 31st March 1889. A great many of the areas included in this return have been finally settled and only await notification to be transferred to form 59-A. They are marked S in 59-C and their total, after necessary settlement reductions, is 3,199 square miles, so that with the 631 square miles of 59-A, the area of settled forest was 3,830 square miles altogether at the end of the year.

8. Form 59-D has again had to be corrected in the matter of the area of Mudumalai forest. In 1885-86 the area was corrected to 47,285 acres, but by misprint 40,715 acres, instead of 80,715 acres, was entered in the column 'excluded.' The next year it was noticed that there had been a mistake of 40.000 acres, but apparently it was supposed that the mistake was in the balance instead of in the exclusion, so that the area on the 1st April 1886 was raised to 87,285 acres. This has consequently again to be reduced and instead of 47,285 acres, the more accurate figures of 46,639 acres given in Mr. Castlestuart Stuart's report on the South-East Wynaad settlement have been adopted.

Unreserved Lands.

9. The *Ganjam* report gives the following as the area of unreserved lands in that district:—

		SQ. MILES.
Berhampore taluk	... ...	185
Chicacole do.	... ...	53
Gúmsur do.	... ...	685
		923

which may be accepted.

10. The *South Vizagapatam* report gives for unreserved lands in taluks to which the Act applies—

	SQ. MILES.
Sarvasiddhi taluk	22
Golgonda do.	39
	61

In *North Vizagapatam* the Pálkonda hills are not under the Act.

11. For *Godávari* the following estimate is given :—

	SQ. MILES.
Bhadráchalam-Rékapalle taluk	235
Rajahmundry taluk	50
Peddápur do.	100
Tuni do	15
Ellore do.	50
Yernagúdem do.	150
Narsápur do.	10
Amaláput do.	15
Cocanada do.	5
	630

which seems to the Conservator lower than is probable. The Agency tracts, like Rumpa, are, however, not included, which may account for the low estimate.

12. The report from the *Kistna* district gives no details, but estimates the total area at 1,500 square miles.

13. The Collector of *Nellore* reports—

	SQ. MILES.
Nellore taluk	170½
Gúdúr do.	115½
Rápúr do.	96
Udayagiri do.	77
Atmakúr do.	295½
Kávali do.	174½
Kandukúr do.	153
Kanigiri do	196½
Ongole do.	139
	1,417½

14. The *Cuddapah* report gives the estimated area as 2,751 square miles for the district, but is unable to give the figures taluk by taluk. The Conservator thinks the estimate is low, but may be adopted. That from *Kurnool* gives the following figures, by ranges :—

	SQ. MILES.
Nandikótkur range	62½
Márkápur do.	206
Cumbum do.	50
Sirvél do.	54½
Nandyál do.	101½
Pattikonda do	430½
Rámallakóta do.	277
	1,182

which is too low in the Conservator's opinion, though he is unwilling to alter the figures. It is better to make too small rather than too large an estimate.

15. The *Bellary* report estimates as follows, for the taluks :—

	SQ. MILES.
Bellary	143
Rayadrug	304
Hospet	135
Kúdligi	413
Hadagalli	160
Harpanahalli	241
Alúr	156
Adóni	210
	1,762

which is too high ; if anything, 1,400 square miles is more nearly correct, and the Conservator proposes to adopt that figure.

16. That for *Anantapur* gives only 91 square miles, which is manifestly far below the real area. The Conservator thinks that 2,300 square miles more nearly represents the proper amount which should be adopted.

17. The area for *Nilgiris* is given as 227 square miles.

18. So that the total area, which is estimated as coming under unreserved lands in the different districts, is 12,474 square miles. The Conservator has not much faith in the utility of such very rough estimates. One might take the figures of column 7 of the schedule in paragraph 4 of G.O., dated 5th March 1889, No. 153, Revenue, on last year's report and calculate as follows :—

		SQ. MILES.
Area uncultivated and waste land, &c.		51,223
Deduct—		
Reserved forest	631	
Do lands	6,424	
		7,055
There remain ...		44,168
Deduct—		
Also for village sites, roads, water, &c., say 10 per cent.		4,417
There remain ...		39,751

which is more than three times as much.

19. Continuing the return given in paragraph 7 of last year's report, we have—

Class of forest.	Area on 31st March 1888.	Added during the year.	Excluded during the year.	Difference.	Area on 31st March 1889.
A. Reserved forests under Act V ..	625	43½	37½	+ 6	631
Do. under other orders ..	..	23	..	+ 23	23
B. Do. under previous rules.	768½	..	768½	— 768½	..
C. Reserved lands	6,367½	182½	125½	+ 56½	6,424
D. Leased forests	198½	..	63	— 63	135½
F. Unreserved lands	..	12,474	..	+ 12,474	12,474
Total ..	7,959½	12,722½	994½	+ 11,728½	19,687½

or, roughly, 20,000 square miles represent the area of forest under the Forest Department in the Northern Circle, at a minimum.

20. The following is the list of areas proposed under section 4 during the year under review, in continuation of those in previous years' reports :—

75. Bellary ... { Jitnakatta ... ... ; Jangukalgutta .. ... ; Alagilivada ... ... ; Uchingidrug ... ... } Notification No. 116 of 20th April 1888.

76.	Bellary	Degalahalu ... ... / Yerúru ... ... / Chippigiri	Notification No. 123 of 27th April 1888.
77.	Godávari	Murari ... ... / Kovida	Notification No. 134 of 9th May 1888.
78.	Bellary	Boodikonda	Notification No. 157 of 8th June 1888.
79.	Anantapur	Gopidevarapalle ... ... / Kondur	Notification No. 232 of 8th August 1888.
80.	Kistna	Extension of (No. 19) Mutukur.	Notification No. 250 of 5th September 1888.
81.	Bellary	Billekal ... ... / Buckasagar	Notification No. 22 of 21st January 1889.
82.	Ganjam	Dabuki	Notification No. 54 of 26th February 1889.
83.	Anantapur	Janavaripalle ... ... / Agraharam ... ... / Venglumcheruvu	Notification No. 74 of 26th October 1888.
84.	Bellary	Banavikal ... ... / Nimblagiri ... . / Gudaikota ... . / Sunkadaikal	Notification No. 79 of 26th March 1889.

21. *Village Forests.*—The only district in which these have been fully formed is the Nílgiris, where 8,735 acres* have been specially set aside and marked off for village use as reported in February 1887. It is from them that villagers now obtain their petty supplies, but pending the orders of Government on the matter, the Collector has arranged for such supplies to be given by free pass issued by the District Forest-officer on his order. The arrangements for their management, though not yet sanctioned, appear to be understood by the villagers and to work satisfactorily. It has been understood that in other districts the backward state of settlement has precluded the extension of the village forest system, for it is clear that the reserved forests must first be selected and settled. The Collector of Nellore, however, reports that steps are being taken to ascertain requirements, and remarks that the provision of free grazing areas for the villagers has received careful attention during settlement.

	ACS.
Paranginád	2,908
Tódanád	* 2,957
Merkunád	1,080
Kundahnád	1,214
Munanád	216
Cherankód	360
	8,735

* (Masnigudi village alone not yet settled).

Wild Tribes in Reserved Forests.

22. The Conservator thinks that a few remarks on this subject may be useful. He does not refer to those tribes who, like the Khonds and Sauras in Ganjam and Vizagapatam and the Koyas and Reddis in the Godávari, have regular villages and do regular cultivation as well as "Kumri," for all such villages have been regularly demarcated even if enclosed within forest limits, with a considerable and amply sufficient area around them for all their purposes, but to those of a less civilized condition who scarcely make any cultivation at all and merely subsist on the produce of the forests and of such few cattle as they possess. In Kurnool and Kistna districts there are the Chentzus for whom special arrangements have been made at the forest settlement, and whom, it may be hoped, we shall gradually succeed in enlisting as our helpers in the work of forest conservancy and most especially in fire protection and the collection of minor produce. The great fires which annually devastate the Nallamalais hills in Kurnool are due, apart from the vicinity of the line of railway under construction, almost entirely to the Chentzus and in their case the usual procedure of prosecutions and punishments fails. The Conservator is anxious that

his desire to enlist the assistance of these wild people should be recorded so that the local officers may in future pay more attention to the necessity for gaining their good will and help.

23. In Nellore, there are a few Yanadis in Strírharikóta who have long been regularly employed by the department in the collection of minor produce, and the Conservator is glad to report that the present District Forest-officer has made excellent arrangements for housing them in good houses at "Broughampet" on a good site where it may be hoped they will suffer less from disease (chiefly leprosy and elephantiasis) than they have hitherto done. The Yanadis in Cuddapah, though they do not actually live within the forests, are very useful and are employed with great advantage as watchers and collectors of produce. But they require to be taught to protect the forests, for this year the worst fire in the Seshachellam hills was the work of Yanadis who were convicted.

24. In the Nílgiris, the necessity for providing for the jungle tribes has recently received considerable attention, chiefly in consequence of excellent recommendations made by the Revenue Settlement-officer of the Wynaad, Mr. A. E. Castlestuart Stuart, C.S., and some remarks of the Conservator's in reference to the Mudumalai leased forest. Under the orders of Government in G.O., dated 17th December 1887, No. 7800, eight villages of Kurumbers have been settled on 183 acres in different localities in the reserved forests and adjacent unreserved lands where their services will be valuable in the collection of minor produce, fire protection and general forest work. Other applications from both Kurumbers and Irulars are also under consideration. It may be recorded here that the Toda lands which usually include valuable pieces of "shola," have not been included in the reserved forests, though they usually adjoin them. The Todas are not allowed to cut the sholas, nor do they want to do so, but they occasionally do some damage by careless firing of the grass on the edges of the forests, though in this there is much improvement of late years. They will, doubtless, by degrees, learn to avoid the forest edges when they burn patches of grass.

Settlement.

25. *Ganjam.*—The Bondagocha and Malati blocks were finally notified during the year. The settlement of 17 other blocks was, however, completed, aggregating 203,520 acres or 318 square miles. The delay in notification is due to the necessity for rectifying mistakes. The settlement of the rest of the Gúmsur forests is well advanced; that of Berhampore is still delayed.

26. *Vizagapatam.*—The Peddapalle forest, 8,960 acres, was notified during the year. Several selections were made by the Sub-division Forest-officer in Golgonda which have since been approved by the Collector. The Collector has, in the Pálkonda Agency tracts, set aside, as reserved forests, 10 areas, 23 square miles, under general orders, the Forest Act not being in force in those hills.

27. *Godávari.*—The Coringa forest, 7,000 acres, was added during the year. The settlement of several forests in the Bhadráchalam taluk, of the Deyancheruvu forest in Rajahmundry, of the Bendamurlanka forest in Amalápur, of the chief forests in Tuni, and of the Bandamcherla and Ramasingavaram forests in Ellore is also completed, aggregating 22 blocks, 145,391 acres or 227 square miles. The settlement of another 10 blocks, 86 square miles, is nearly done. New selections were made of 10 areas in Yernagúdem taluk and one in Tanuku, aggregating 126 square miles. The notifications under section 4 of the Act for the areas in Lakkonda and Juddengy selected in 1885-86 were revised but have not yet been published. It is proposed to extend the Forest Act to Juddengy as has been done in Bhadráchalam, and it is hoped that the Government will approve of this.

28. *Kistna.*—The district report says "very good progress has been made during the year. At the end of the year only three claims remained undisposed of before the Forest Settlement-officer, all the appeals filed in the Collector's court had been

disposed of and one appeal was pending in the District Court." Eight blocks of forest, 6 square miles, were added to the reserved forest during the year. Several areas (see form 59-C) aggregating 177,072 acres have been finally settled and report submitted, so that there now remain only 233,029 acres under settlement, and these so far done that the District Forest-officer is able to report as above.

29. *Nellore.*—Two forests, containing 2,035 acres, were notified during the year. In this district progress has been slow, except in the small taluk blocks; but it is necessary to note that in them several areas were completed, but the registers, maps and notifications were so carelessly done as to require to be returned by the Board of Revenue or the Conservator sometimes even twice, for rectification. Blocks, however, giving 61,867 acres have been completed—see form 59-C. The Strîharikóta compensation questions are still under settlement, but the Veligonda blocks are nearly completed. The Kálahasti Rajah's claim for about 125 acres in Udáyagiri drúg was decided during the year in his favor; that for about 1,000 acres in the Yerrakonda forests was decided against him, but he will probably appeal. The settlement of the Chimakurthi and Kanigiri hills awaits the result of the Collector's investigation of certain boundary questions.

30. *Cuddapah.*—No forests were finally notified during the year, but 59 blocks some of great importance and aggregating 704,474 acres, have been finally settled. Work is now going on much better though the more difficult work in Nellore has necessitated the Forest Settlement-officer spending more time there than in Cuddapah.

31. *Kurnool.*—No forests were added to the reserves, the settlement records of the Nallamalais forests having had to be returned for revision. It will be a great advantage when these forests can be finally notified. Only the Yerramalai selections now remain and these are in progress. Further selections of reserved forests in the taluks of Rámallakóta, Pattikonda and Koilkuntla especially will soon be made and proposed.

32. *Bellary.*—No reserved forests have yet been finally notified. The settlement work of the Shivpur forest in Kúdligi and Hadagalli 9,000 acres; of 11 blocks in Adóni aggregating 17,882 acres; of 9 pieces in Alúr giving 2,366 acres; and of the Timmapuram reserve in Bellary 1,267 acres, have been completed. In this district and in Anantapur work is very much hampered by the absence of maps. There is a Revenue Survey Party at work in the district and maps of some villages are available but not of all, and there are none of the taluks. However, arrangements have been made for the preparation of forest maps by Mr. Cook's Party and the work is in progress.

33. *Anantapur.*—No additions were made during the year to the reserved forests. The settlement of 18 forests, aggregating 76,780 acres, has been completed, but the Conservator regrets to state that the mistakes made in the papers sent up have been so numerous as to make it almost impossible that they can be accepted until they have been completely revised. The difficulty about maps is the same as in Bellary, but so far as forests are concerned, which lie wholly in the Gooty, Tadpatri or Penukonda taluks, village maps are available; for the others there is nothing but the 4 miles = 1 inch Atlas sheet from which the District Forest-officer prepares enlarged sketches.

34. *Nilgiris.*—No additions were made to the reserved forests. All the settlement work has been completed except Sígúr, Devamalai, Rallia, Naduhatti and Nadukaduhalla forests which require still the settlement of a few points of doubt. But the notification under section 16 has not yet issued for 45 Paranginád and 7 Tódanád reserves, 18,239 acres, whose settlement has been finished, nor has the notification under section 4 for 18 areas in Merkunád and Tódanád, the last of our selections, aggregating 10,180 acres, and submitted two years ago, yet been passed.

35. The following return, prepared under the orders of Government in paragraph 5 of G.O., No. 153, Revenue, of 5th March 1889, shows the condition of settlement work on the 31st March 1889. It has not been thought necessary to give separate details

for the areas notified under section 4 in each year since 1883, as such details present no particular feature of interest and only make the returns more complicated :—

District.	Under settlement up to 31st March 1888.		Added in 1888-89.		Total.		Finally notified up to 31st March 1888.		Finally notified during 1888-89.	
1	2		3		4		5		6	
		ACRES.		ACRES.		ACRES.		ACRES.		ACRES.
Ganjam	34	337,626	1	1,450	35	338,976	1	5,486	2	6,120
Vizagapatam	1	8,960	..	..	1	8,960	..	..	1	8,960
Godávari	45	453,145	2	4,100	47	458,045	1	114	1	7,000
Kistna	54	422,368	..	10	54	422,378	2	8,320	8	3,957
Nellore	120	305,230	..	..	120	305,230	5	1,623	2	2,035
Cuddapah	114	1,207,315	..	..	114	1,207,315	21	223,958	..	..
Kurnool	14	1,097,780	..	..	14	1,097,780	..	..	..	..
Bellary	37	129,636	13	71,402	50	201,038	..	..	..	..
Anantapur	38	165,278	5	10,700	43	175,978	5	8,818	..	..
Nilgiris	172	189,036	..	..	172	189,036	115	127,642	..	..
Total ..	629	4,317,074	21	87,662	650	4,404,736	150	375,961	14	28,072

District.	Total finally notified.		Balance.					
			Settled and report received in Circle office.		Settled but report not yet received in Circle office.		Settlement proceeding.	
	7		8		9		10	
		ACRES.		ACRES.		ACRES.		ACRES.
Ganjam	3	11,606	9	92,480	8	111,040	15	123,850
Vizagapatam	1	8,960	..	..	..	..	..	..
Godávari	2	7,114	22	145,391	10	55,020	13	250,520
Kistna	10	12,277	26	127,171	5	49,901	13	233,029
Nellore	7	3,658	37	61,867	29	63,225	47	176,480
Cuddapah	21	223,958	42	612,020	17	42,454	34	278,883
Kurnool	..	..	7	902,400	2	12,880	5	182,500
Bellary	..	..	14	18,563	2	11,952	35	170,523
Anantapur	5	8,818	14	69,100	4	7,680	20	90,380
Nilgiris	115	127,642	52	18,239	..	..	5	43,155
Total ..	164	404,033	223	2,067,231	77	404,152	187	1,549,320

The areas of blocks as given in Form 59-C have been adopted.

36.-The settlement work of the year was chiefly done by two special Settlement-officers—

M.R.Ry. D. Jagannádha Row in Godávari, Kistna and Kurnool.

,, I. Sarabhalingam Naidu in Nellore, Cuddapah and Bellary.

In other districts the local Divisional officers are the Forest Settlement-officers as explained last year. The Conservator considers that both the special Settlement-officers have worked hard.

Demarcation.

37. In *Ganjam* there were 27 miles demarcated in Western Gúmsur and 46 in Eastern Gúmsur. The line consists of a 10-feet cut line with cairns about 4 feet square and posts 4 feet above ground at all corners at about 150 yards apart in straight lines. The cost in Gúmsur is reported to have been Rs. 16 per mile including marks for the year, but this refers to the whole work and not to areas fully completed which alone it is safe to take for comparison of cost. The total amount spent during the year was Rs. 2,129. A useful return and map have been submitted by the District Forest-officer showing progress and cost to date. The following forests have been completed in Gúmsur :—

Name.	Length of line.	Number of marks.	Cost.	Cost per mile.	Remarks.
	MLS.		RS.	RS. A. P.	
Panchbuthi	35	740	314	8 15 6	Eighteen marks per mile on an average.
Kurcholi	21½	324	289	13 7 0	
Vishnuchakram	23¾	354	359	15 1 10	
Sandusalya..	7¾	170	220	29 5 7	
Bodochendana	5¼	114	98	17 12 2	
Koolada	9¼	109	347	37 7 7	
Venjagiri	17¾	400	151	12 14 1	
Malati	11¼	250			
Rayigoda	17¼	260	168	9 11 7	
Total ..	149	2,721	1,946	13 0 11	

In Gúmsur, the total amount to be done is 973¾ miles, of which 621 miles have been completed. Some of this, however, consists of lines between two blocks which the Conservator thinks it is unnecessary to demarcate. Of 17,963 posts required, 7,016 have been put up; while the amount spent on the taluk to date is Rs. 11,008. Some forests merely await the settlement of boundary questions to be completed. In Berhampore range, the Ramogodo, Bainamari and South Mohiri forests with 58¾ miles of boundary have been completed at a cost of Rs. 405, or nearly Rs. 7 per mile, but the posts are not yet up. Seven small blocks of proposed reserved forests in Berhampore taluk with 23 square miles of line have been demarcated by a trench and hedge of screw pine at a cost of Rs. 355, or Rs. 15-7-0 per mile. It is hoped that the current year will see the demarcation completed. In the Ganjam district demarcation work is comparatively expensive as the lines are nearly all through thick forest in which many trees, some of large size, have to be cut. For such forest the Conservator does not consider Rs. 13 per mile too heavy a rate, by any means.

38. *Vizagapatam.*—In the Pálkonda hills, the Antikonda forest was commenced and 15 out of 16 miles done at a cost of Rs. 52-6-0, but posts have still to be put up. In Sarvasiddhi, the Peddapalle forest, 43½ miles of boundary, has been completed and 75 out of 200 posts erected at an expenditure of Rs. 364-9-0. In Golgonda, three forests were preliminarily demarcated, Arlova, Madalamma and Pedim, 30¾ miles of boundary, but without marks, pending settlement, for Rs. 227-8-6, or about Rs. 7 per mile of line. In some, in this district, 89¼ miles were done for Rs. 645. The character of the lines is similar to that of Gúmsur.

39. *Godávari.*—During the year the following work was done in the district:—

			Average about.
		RS.	RS.
120¾ miles, preliminary, for		605	5
217 „ final „		2,567	12
17¼ „ fenced „		439	25½
355		3,611	

while 590 posts were erected for Rs. 559 or nearly one rupee each, which is rather high. As for Ganjam, the District Forest-officer has submitted a return showing the progress of demarcation work to date. From it, it would seem that only a few forests are absolutely complete, viz., the following:—

Taluk.	Forest.	Length of line.	Posts.	Cost.	Average per mile.	Remarks.
		MLS.		RS.	RS. A.	
1 Rajahmundry ..	Devancheruvu ..	14½	125	1,005	69 5	10-feet lines; thorn fence.
2. ..	Kothapalli ..	41½	82	1,138	17 6	10 feet lines and posts.
3. Cocanada ..	Coringa ..	16	99	120	7 8	Creek boundaries, so no lines; posts only.
4. Ellore ..	Barrikonda ..	11½	57	328	29 2	10 feet lines and posts.
		83½	363	2,591	..	

the average for regular line clearing (Nos. 2 and 4) with posts being about Rs. 27-12-0 or more than double the cost in Gúmsur. The total expenditure was Rs. 4,158.

40. *Kistna.*—Two hundred and fifty-one miles were done during the year at a cost of Rs. 4,416, or Rs. 18 per mile. But much of this is for incomplete lines, so that the statistics are of no use for comparative purposes. It seems that the following forests are now completely finished :—

Taluk.	Forest.	Length of line.	Marks.	Cost.	Per mile.
		MLS.		RS.	RS
Bezváda	Kondur	15	122	323	22
Krósur	Venkatayyapalem ..	53½	331	1,393	26
Do.	Nevalipur	2	20	38	19
Bápatla	Mathayyapalem ..	3½	33	289	80
	Bápatla (1)	* ¼	8	18	90
Bandar	Kanukolu	† ¼	3	18	102
		74½	517	2,079	28

* 362 yards. † 295 yards.

so that Rs. 28 and not Rs. 18 should be taken as the cost per mile. It seems that there is not much left to be done, but it may be hoped that in future there will be greater economy and that blocks will be finished off and not left partly done.

41. *Nellore.*—It is reported that 470 miles were demarcated during the year at a cost of Rs. 2,992, or Rs. 6-6-0 per mile. From the statement submitted, however, it would seem that, as in other districts, much of this length was not absolutely completed with posts, &c., so that, for comparison's sake, we must select those areas which are fully done. Among such, apparently, are—

Taluk.	Forest.	Length.	Cost.
			RS.
Gúdúr	Velliped	4¼	31
	Kadived	4	26
	Vadur	5¼	48
	Nellaballi	2¾	24
	Chillakur	4¼	33
	Gúdúr	5½	44
	Vedur	4	27
		31	233

or an average of Rs. 7-8-0 per mile, which is a fair rate, considering that in Nellore it is mostly only small jungle that has to be cut and that palmyra posts are cheap. It seems that the line cutting work has made good progress, but the erection of marks is still backward, probably because it is judged best not to do it until settlement has so far progressed that it is certain that the line will no longer be further altered. The Board's orders on many forests recently have directed alterations and all these will increase the expense of demarcation. The boundaries of the Strírharikóta forests and the Casuarina plantation reserves have been sown with palmyra seeds, which are doing very well.

42. *Cuddapah.*—During the year 141¾ miles of line were cleared and 1,487 posts erected at a cost of Rs. 3,316, or Rs. 23-6-0 per mile. The lines are 15 feet broad and the loose stones are cleared off, so as to make them more useful for protection purposes so that the work seems more expensive than it really is. These figures may be taken as a fair average. The return of exact condition of demarcation work has not yet been received, but the District Forest-officer has submitted an excellent map showing the state of the work.

43. *Kurnool.*—The chief piece of demarcation work is that of the Nallamalais, where 248 miles had been completed up to the year and 15 were done in the year under review at a cost of Rs. 658, including the reclearing and repairing of posts along the old line. Part of the line is 30 feet and part 15 feet broad and the forest is, like that of Ganjam and Godávari, heavy with many trees and an abundant yearly

crop of coppice. In the Veligondas, 64 miles were done in previous years and 40 miles in the year under review at a cost of Rs. 61, most of the work being done by villagers for the permission to take free the cut material. In the forests of the Yerramalais, the following were done :—

			MILES.	RS.
Dhone reserved forest	... ...		59	385
Gadithemadugu reserved forest	... ...		10	51
Lanjabunda do.	do.		14	93
Yaipalapadu do.	do.		25	178
Rámallakóta do.	do.		20	87
Jaladurgam do.	do.		10	41
			138	835

or Rs. 6 per mile, which is about the correct rate for forests where there is little but small scrub and a few trees to cut. The total amount done in the year was 193 miles at a cost of Rs. 1,560, or an average of Rs. 8 per mile for the whole.

44. In *Bellary*, 19½ miles were cleared during the year, and a very large number of posts erected at a cost of Rs. 543. But the lines were not at all fully demarcated, and the posts usually belonged to lines already cleared, so that the only figures we can take are those of the Tumergudi reserved forest where 4½ miles with 40 cairns were demarcated at a cost of Rs. 46, or about Rs. 10 per mile. This is rather heavy for such a country as Bellary where there is very little to be cut.

45. In *Anantapur*, 43½ miles of line were cleared at a total cost of Rs. 862, but, as in Bellary, the work is partial and the data cannot be used for comparison purposes. The following five reserved forests, which are apparently completed, give about Rs. 8 per mile, which is not at all heavy when it is considered that loose stones are cleared off the lines and the posts have often to come from far. The Muchukota demarcation is well done and is a good type of a useful line :—

Taluk.	Forest.	Length of line.	Marks.	Cost.
		MLS.		RS.
Anantapur and Tadpatri ..	Muchukota	84¼	880	588
Anantapur	Durgam	19¼	285	149
Dharmavaram	Kalyándrúg	13	191	81
Penukonda	Narsampalle	5	118	130
Hindupur	Somarazmalai	6	42	61
		127½	1,516	1,009

The wall of the Gootoor Reserve, referred to last year, which cost Rs. 1,467 for nearly 15 miles of line, or Rs. 100 per mile nearly, is a good work which is likely to be useful and not expensive.

46. In *Nílgiris*, 121½ miles were demarcated at a cost of Rs. 2,002, or Rs. 16-8-0 per mile, including post. In addition, 542 posts were renewed for Rs. 75, or As. 2-2 each, and 5¼ miles recleared as usual for Rs. 49, or about Rs. 9-5-0 per mile. The demarcation of nearly all the Nílgiri forests has now been done, the average cost being about Rs. 9 per mile of line and 4 annas per mark, the marks consisting of posts surrounded by piles of stone. The total amount spent was Rs. 2,431.

47. Thus, taking only fully completed areas, the cost of demarcation in the different districts compares as follows, per mile, posts included :—

	RS.	A.	P.	
Ganjam	13	0	0	Thick forest.
Godávari	27	12	0	Mostly thick forest.
Kistna	28	0	0	Thin forest.
Nellore	7	8	0	Do.
Cuddapah	23	6	0	Some thick, some thin forest.
Kurnool	8	0	0	Some thick, some very thin.
Bellary	10	0	0	Very thin forest.
Anantapur	8	0	0	Thin forest.
Nílgiris	16	8	0	Some thick forest, some grass only

The Cuddapah lines are broader, which accounts to some extent for the high rate, but the rates in Godávari, and most especially in Kistna, are much too high. The Conservator has, on several occasions, during the year, objected to the high rates charged in Kistna, and he trusts he may not have to do so again. Taking all considerations into account, the cheapest work is that done in Ganjam and Kurnool.

CHAPTER III.

Surveys, Working Plans and Plans of Operations.

48. (*a*) *Surveys.*—The survey of the forests of the districts of Bellary and Anantapur has during the year been ordered by Government to be taken up by No. II Party now at work in those districts. Under Mr. J. H. Cook, work began on the 15th February 1889, and before the close of the year 14 blocks of forest in the Adóni and Alúr taluks, aggregating about 9,386 acres, had been done. The maps are to be on the scale of 4 inches to the mile and to show as accurately as possible the boundaries and the interior features, both natural and artificial.

49. In Ganjam, some small surveys were made by the local staff, assisted by temporary hands, to fix the boundaries of compartments and to lay down reserved forest boundaries more accurately on the maps. In Godávari, boundary surveys were made for the Devancheruvu, Murari and Kovida reserved forests. In Cuddapah, a traverse was made of the boundary of the Lankamalai reserved forest. In other districts no work was attempted.

50. (*b*) *Working plans.*—The following are the working plans so far prepared :—

1.	Nellore district ...	Casuarina plantations ...	...	By Mr. Vincent—see para. 29, Annual Report for 1885-86.
2.	Cuddapah district ...	Ballipallo.		By Conservator — see para. 29, Annual Report for 1885-86.
3.	Bellary do. ...	Sandúr		
4.	Nílgiri district ...	Cairn hill working circle ...		By Conservator — see Inspection Note of 6th April 1887.
5.		Aramby working circle ...		
6.		Governor's shola working circle ...		
7.		Coonoor peak working circle ...		
8.		Bleakhouse do. ...		
9.		Bandy shola do. ...		
10.		Blackbridge do. ...		
11.		Ghât Reserve do. ...		
12.		Barliyár do. ...		

51. As explained under "plantations," the working plan for the Casuarina plantations has had to be kept in abeyance since 1886 in order to clear off the windfall wood caused by the cyclone of November that year. As also there explained, it is now proposed to modify the working plan and to endeavour to provide for permanent reproduction instead of relying on clear cutting and replanting, which has not been very successful.

The total expenditure on the plantations covered by the working plan has been up to date Rs. 1,78,000—see Appendix B. Adding to this two-thirds of the amount as an estimate of probable establishment charges, we have Rs. 1,78,000 + Rs. 1,18,000 = Rs. 2,96,000, interest on which at 4 per cent. is Rs. 11,840. Now the total amount realized has been (see Appendix B) Rs. 82,426 in 5 years, or Rs. 16,485 yearly, which shows that we have obtained $5\frac{1}{2}$ instead of 4 per cent. interest. The Conservator has given this calculation because in the return in the Appendix it may be noticed, especially with Tamminapatnam, that the amount realized by cutting certain compartments was considerably less than the cost of the compartments. That was no doubt true, for those compartments were old Jungle Conservancy work and had been very expensive, but the results for the whole area are fully satisfactory. For the 5 years during which Mr. Vincent's working plan has been in force, the average outturn has been 2,650 tons yearly, which is a little more than the estimated annual yield of 2,500 tons. During the year 4,010 tons of casuarina wood, mostly from the previous year's cuttings, were sold locally for Rs. 20,819, or about Rs. 5 per ton.

52. In the Ballipallo working circle in Cuddapah compartments 7-*a* and 9-*a* were cut, the result being :—

Compartment.	Area.	Engine fuel.	Small fuel.	Total.	Amount per acre.
		TONS.	TONS.	TONS.	TONS.
7-*a*	26	195½	250	445½	17
9-*a*	11	154½	133½	288	26
Total ..	37	350	383½	733½	20

In paragraph 16 of last year's report, it was shown that the cuttings of the last six years had given the following results :—

Year.	Area cut.	Outturn.	Average per acre.
		TONS.	TONS.
1882-88	309¾	4,848	15·6
Add.			
1888-89	37	733½	20
Total ..	346¾	5,581½	16

53. The working plan for Sandúr has, according to the results of the Conservator's recent inspection, been practically taken as of no account as explained in paragraph 114. There is no use saying more than that 50 tons small wood were cut in Rámandrug compartment 15 and 142 tons in Donemalai compartment 4 at a cost of Anna 1 and Pies 6 per acre.

54. The results of the year's work in working circles Nos. 4 to 9 in the Nílgiris is given in Appendix C. It will be seen that the chief plantations gave—

Area. A.		C. FEET.	
24	Bleak house	12,564	
7	Bandy shola	22,047	
11	Coonoor Peak	164,202	or 5,614 cubic feet per acre.
4	Cairn Hill	49,471	
10	Aramby	66,110	
56		314,394	

The provisions of the working plans have not been very rigidly adhered to, which the Conservator is disappointed to find. The working plan for Blackbridge (No. 10) has never been carried out at all. Those for the Ghât Reserve and the plans of operations for other indigenous forests have been held in abeyance under what the Conservator cannot help thinking is an erroneous notion, the idea that the Government had ordered all fellings in indigenous forest to be stopped. The Conservator believes the Government only intended their order to refer to some of the forests in the Ootacamund settlement and especially to Lovedale, Fairlawns and Marlimund sholas which are places of public resort.

55. *Plans of operations.*—Plans of operations, as explained in paragraph 16 of last year's report, are being made by Mr. Lushington for the Sál forests of Ganjam.

In other districts not much has yet been done, but as the areas are constituted reserved forests, the Conservator intends to have the plans of operations made and regularly recorded. Some have already been sent in, the rest are expected with the budget.

CHAPTER IV.

PROTECTION AND IMPROVEMENT.

(*a*) *Establishment.*

56. *I. Superior staff.*—The staff during the year consisted of—

One Conservator	Mr. J. S. Gamble on furlough to 6th January 1889. Mr. A. W. Peet, acting.

One Deputy Conservator—
Mr. F. d'A. Vincent (on furlough).
„ J. H. B. Brougham ... ... Nellore.
„ E. D. M. Hooper was transferred to the Southern Circle in May 1888.

Five Assistant Conservators—
Mr. A. W. Lushington ... ... Ganjam.
„ G. Homfray ... ... Kistna.
„ J. S. Battie ... ... Godávari.
„ F. A. Lodge ... ... Cuddapah.
„ H. T. D. Sweet (on furlough).
„ P. M. Lushington ... ... Kurnool.

Mr. C. D. McArthy, trained Forest-officer from the Cooper's Hill College, joined the circle in December 1888 and was posted to Cuddapah as an Assistant Conservator.

Thus, it will be seen there were only six Deputy and Assistant Conservators available during the year for district charges, and one of these has not yet passed his examinations. Consequently three districts—Bellary, Anantapur and Nílgiris—had to be placed under Sub-Assistant Conservators, and one—Vizagapatam—divided into two charges held, respectively, by the District Forest-officers of Ganjam and Godávari in addition to their own duties. This latter arrangement is an inconvenient one which the Conservator can only regret, in agreement with the Collector (Mr. Willock), who remarks " practically nothing has been done during the year. I suppose this was unavoidable in the absence of a District Forest-officer, but I think it is much to be regretted that such was the case."

57. The weakness of the staff of the circle is so marked that it is difficult to see how proper progress is to be expected unless matters alter, and we obtain a staff fit to do the work. Six officers for nearly 20,000 square miles of forest of all kinds and over 7,000 square miles of reserved forests (present or under settlement) is obviously utterly inadequate, especially when it is considered that there are forest divisions in Northern India in which 100 square miles is not considered too small an area for one officer. If our full complement of ten District Forest-officers were all present, each would have on an average 730 square miles of reserved and 1,249 square miles of unreserved forest to look after. In some districts, the want of good officers, capable of taking their full responsibility, has resulted in the state of affairs becoming bad and especially is this the case in Anantapur. If we get no assistance from the Government of India as has been urgently asked for, it is to be feared that not only will progress be very slight, but works already done will suffer and the revenue be seriously affected.

58. *II. Subordinate staff.*—There was no change in this during the year, the sanctioned establishment being as follows:—

Sub-Assistant Conservators	6
Forest Rangers	22
Foresters	48
Forest guards	348
Total ...	424

at a cost of Rs. 6,176 monthly. This, too, is inadequate for present wants, and proposals for the necessary increase are now before the Government.

59. At the close of the year the following officers returned from the Forest School at Dehra Dún with the Ranger's certificate:—

V. Alwar Chetty, B.A., Sub-Assistant Conservator.
T. N. Hearsey, do. do.
W. R. McCay, Forest Ranger.
L. Hanumanthulu, Forester.
S. Afokiaswamy Pillai, do.
P. R. Rathnaswamy Pillai, do.

the first-named officer obtained several prizes and honors in most subjects.

60. *Ranges.*—The distribution of ranges during the year was as follows :—

District.	Range.	Officers.	Area of reserved forest and proposed reserved forests, reserved lands, leased forest, &c.	
			Sq. MILS.	
Ganjam ..	Eastern Gúmsur	1 Forest Ranger, 1 Forester	271	
	Western do.	1 Do. 1 do.	237	
	Berhámpore	1 Do.	37	
	Chicacole	....	5½	
				550½
Vizagapatam ..	Pálkonda	1 Forest Ranger	23	
	Sarvasiddhi	1 Forester	14	
	Golgonda	1 Do.	10	
				47
Godávari ..	Bhadráchalam	1 Sub-Assistant Conservator, 1 Forest Ranger and 2 Foresters.	526	
	Rajahmundry	1 Forester	77	
	Peddápuram	1 Forest Ranger	252½	
	Delta	1 Forester	48½	
	Ellore	1 Forest Ranger and 1 Forester	165	
				1,069
Kistna	Bandar	1 Forester	43	
	Bezváda	1 Forest Ranger	87½	
	Guntúr	1 Forester	29	
	Bápatla	1 Do.	38	
	Krósúr	1 Do.	104½	
	Vinukonda	1 Forest Ranger, 1 Forester	188	
	Palnád	1 Forester	193	
				683
Nellore	Strîharikóta	1 Forester	56	
	Casuarina Plantations	1 Do.	4½	
	Gúdúr	1 Do.	36	
	Rápúr	1 Do.	129	
	Nellore	1 Do.	38½	
	Atmakúr	1 Do. (temporary)	47½	
	Kanigiri	1 Forest Guard	72	
	Kávali	1 Do. Ranger, 1 Forester	96½	
	Udayagiri	1 Do. Guard	19	
				499
Cuddapah ..	Kódúr	1 Forest Ranger	284	
	Rájampet	1 Forester	126½	
	Sidhout	1 Do.	246½	
	Badvél	1 Forest Ranger	269	
	Proddutur	1 Forester	133½	
	Cuddapah	1 Forest Ranger	316½	
	Kadiri	1 Forester	214	
	Madanapalle	1 Do.	103½	
	Ráyachóti	1 Do.	204½	
	Váyalpád	1 Forest Ranger	124½	
				2,022½
Kurnool ..	Nandikótkur	1 Forest Ranger	400	
	Nandyál	1 Do.	300	
	Sirvel	1 Forester	200	
	Cumbum	2 Foresters	362	
	Márkápur	1 Forest Ranger	415	
	Rámallakót	1 Forester	19½	
	Pattikonda	1 Do.	50½	
				1,747
Bellary ..	Sandúr	1 Forest Ranger, 1 Forester	125½	
	Bellary	1 Forester	42½	
	Adóni	1 Do.	61½	
	Kúdligi	1 Do.	67½	
	Harpanahalli		84½	
				381½
Anantapur ..	Gooty	1 Forester	84	
	Machukóta	1 Do.	45½	
	Penukonda	1 Forest Ranger	83	
	Dharmavaram	1 Forester	32½	
	Hindupur	1 Do.	43½	
				288½
Nílgiris ..	Ootacamund	1 Forest Ranger	26	
	Naduvatam	1 Forester	29½	
	Melúr	1 Do.	84	
	Coonoor	1 Forest Ranger, 1 Forester	35½	
	Kótagiri	1 Forester	18	
	Sígúr	1 Do.	79	
	Mudumalai	1 Forest Ranger	111	
				383
		Grand Total ..	..	7,671

which is made up of—

Reserved forests	631
Proposed reserved forests	6,280½
Reserved lands	171½
Leased forests	135½
Selected for reserved forests	452½
Total ...	7,671

61. The above statement shows the approximate areas of reserved forest in the ranges. The areas of unreserved forest cannot be given range by range, but if 12,474 square miles is the area adopted for the unreserved forests in 58 ranges, each range will on an average control 215 square miles. So, too, taking 7,671 square miles as the area of reserved forest, leased forest and reserved lands (nearly all proposed reserved forest), the average area of the beat of each of the 348 forest guards is about 22 square miles of reserved and 36 square miles of unreserved forest. In the Central Provinces, the province which most nearly resembles Madras in forest matters, each forest guard has 16 square miles of reserved forest, 1st and 2nd class, to look after. In most other provinces the area is very considerably less.

(b) General protection and breaches of Forest Rules.

62. Form 63 gives the statement of prosecutions for the year. There were 1,204 new cases, and 1,150 disposed of, of which 834 or 72 per cent. resulted in conviction. There was an important case in the Váyalpád taluk of Cuddapah in which the systematic theft of Red Sanders wood for the manufacture of Tirupati images was discovered. The accused were acquitted, but a fresh trial was ordered, while it seemed probable that the forester, who has since absconded, was implicated in the affair. He has since been convicted.

63. In Kurnool, two important cases of timber theft are noticeable; one in which a tannadar was sentenced to four months' imprisonment and Rs. 200 fine; and another in which a Railway fuel contractor in Pattikonda, who had been twice previously convicted, was sentenced to six months' rigorous imprisonment and Rs. 50 fine. An important case in the Adóni taluk of Bellary was tried and disposed of as a revenue case and does not come into form 63, but is nevertheless noticeable. The headman and karnam of a village was punished for entering in their durkhast memorandum that there were only 60 trees of any value and 100 of none on a piece of land which, however, was found by the Tahsildar to contain no less than 671. In Anantapur also, the headman and others of a village in Dharmavaram taluk were convicted of cutting trees in the Nyalakota reserve; the case is under appeal to the High Court.

64. The Conservator is glad to notice the decrease in number of cases in Godávari, Nellore and Nílgiris, which he believes to be due to better personal supervision by the staff within the forests, rendering the commission of offences difficult and consequently reducing their number. In his opinion, the better the protective staff look after their forests within them instead of trusting to passes and paper checks without, the better the forests are protected and the fewer are the cases which require prosecution.

65. The number of cases compounded was 529 and the amount received was Rs. 1,818. One curious case occurred in Ganjam in which the headman of a village in Gúmsur taluk sent his servants and brought out three loads of wood for his own use without permit. This was compounded for Rs. 100. The District Forest-officer of Kurnool brings to notice how some Magistrates misunderstand the section, one of them having adjourned a case before him in order to know if it could not be compounded. The orders of Government (G.O., No. 153, Revenue, of 5th March 1889) were received too late for the record of any information regarding cases found to be false or unproven when taken before the compounding officer, but special report is under preparation.

(c) Forest fires and fire-protection.

66. Form 62 has been very carefully scrutinized. The Conservator has struck out several areas which were not burnt and on which no money was spent, for it is useless to enter all areas, and the deductions to be made from the figures, not very

reliable at the best of times, are even less so when such areas are entered. Forests vary so much in their comparative liability to fire that returns like No. 62 can only be used as a record, and comparative deductions from them require to be made very cautiously. Out of 1,667 square miles whose protection was attempted, 229 were burnt, *i.e.*, nearly 14 per cent., so that 86 per cent. were saved. The cost of protection of 1,438 square miles was Rs. 14,216, or nearly Rs. 10 per square mile, which is by no means an excessive rate.

67. In *Ganjam*, as might be expected this year, fires were very bad, and especially in Chondorgiri and Ambazara forests where the grass is thicker than in the forests in the more level country. Still, it is satisfactory that matters in such an exceptional season were not worse.

68. The Peddapalli reserve in *Vizagapatam* was successfully protected, but there is not much inflammable material. When the Golgonda and Pálkonda forests are taken in hand, where the grass is heavier, it will be harder work.

69. In *Godávari*, there were some bad fires in Bhadráchalam, the whole of Rapak reserve and considerable areas of some other reserves having been burnt. In the lower taluks and in Rékapalle protection was more successful.

70. In *Kistna*, fires were very few and protection successful; but in *Nellore*, where it is in the Veligonda hills alone that fires are common, an area of over 10 square miles was burnt. As usual, it is said that the fires came from the Cuddapah side, and this statement is endorsed by the personal note of the Collector, Mr. C. D. Macleane. The Cuddapah officers say fires come from Nellore: probably both are right, and the fires are lit on the ridge by graziers.

71. In *Cuddapah*, fires were few up to the 31st March, though it is to be regretted that since then there have been several which have caused a good deal of damage. Fires in Cuddapah are usually the result of incendiarism, and no amount of reasonable expenditure can prevent that. We can only hope to make it understood by degrees that the Government is anxious to protect its forests, and enlist the sympathies and the active help of the people. The remarks of the Collector (Mr. E. J. Sewell) are herewith reproduced:—

"The fire season has, as the District Forest-officer says, been disastrous. The forests were very dry and fires began unusually early and have raged far and wide I think there is little doubt that the forest establishment is far too weak to prevent them. The forests in which fires broke out are for the most part a very long way from the nearest village, while such villages are, as a rule, small, thinly inhabited and with poor village officers and ryots. If they accompany the Government officer who goes to put out the fire and help him, that is as much as they can be expected to do. We cannot, therefore, look for much help from them in *preventing* fires. It seems to me that it would be better policy to concentrate the temporary establishment (much strengthened) in the fire season on the larger blocks of really valuable forest, such as the Kódúr range, the Lankamalais, Seshachellam, and Pálkonda Hills and one or two other blocks and really keep the fire out of them."

The Collector's advice is really what is being followed, for the chief areas to which attention is devoted are the Seshachellam, Palkonda and Lankamalais forests. But we have endeavoured not quite to neglect other areas. It may be interesting to record here the system by which incendiaries work in Cuddapah as discovered by Mr. Lodge. Two bratties (cowdung cakes) are procured, one dry, the other damp; the dry one is lit, and the damp one placed over it and some grass on top. By degrees the fire passes from the dry one to the damp and thence to the grass and on to the forest. When the latter catches, the perpetrators are far away.

72. As usual, in *Kurnool*, large fires devastated the Nallamalai hills. Along the new railway, of course, everything almost was burnt; and in other parts the Chentzus were as active as usual in burning the forest. Here, too, punishments and threats are of little avail, but the Conservator is glad to say that a beginning is being made to get the Chentzus to become our assistants and not our opponents in protection.

73. The large fires in the Sandúr hills of *Bellary*, which have been specially reported, occurred partly in, partly after the end of, the year under report. About one half of the total area of the leased forests was burnt, but the portions where thinnings and clearings had been made were fortunately saved. The occurrences have been specially reported on. In *Anantapur*, the only fire of consequence was an

unfortunate one in Kottakota—unfortunate, because in that reserve the seedlings had been coming up in a very promising way. But the area burnt was small.

74. In *Nilgiris*, it is regrettable that the Moyar and Sigúr forests were almost completely devastated, the fires being, as usual, the work of Jain Kurumbers, a tribe of the very shyest nature whom it is most difficult to get access to. The Collector and District Forest-officer are taking steps to get more into the confidence of these people and to employ them, and it is to be hoped that their endeavours will meet with success by degrees. In other parts of the district, and especially in the lower slopes of the Coonoor Valley and adjacent forests, where very careful arrangements were made, protection was happily very successful.

75. On the whole, therefore, the year was a bad one for fire-protection, but it must not be forgotten that the forest staff is extremely weak and that in most districts the heavy work of settlement and demarcation has told and has prevented as much success in fire-protection as we might hope for were we not encumbered with these absolutely necessary preliminaries to steady work. There is no doubt that fire-protective works were somewhat backward this year, as the Conservator found on his tour in February 1889 in the Ceded Districts; he trusts that in another year District Forest-officers will begin these important works at a much earlier season. But on the whole he thinks the success obtained *under the circumstances* was good. Personal energy and extra expenditure avail little, as before remarked, when incendiaries are determined to burn. We can only hope year by year, to get on better terms with our neighbours and by degrees we shall succeed, and these remarks will show one reason why the Conservator attaches such little value to any deductions from the statistics of Form 62.

76. The Government, in paragraph 9 of their review of the Annual Report for 1887-88, compare our results with those of the Bombay Presidency which cost 2 annas per square mile. In paragraph 51 of the Inspector-General of Forests' Review of the Operations of the Department for 1886-87, it is explained that almost the whole area under the Bombay Forest Department is entered in the returns (total area of reserved forest 14,244 square miles, area attempted to be protected from fire 11,078 square miles). This in itself, apart from the fact that the greater part of the Bombay Presidency rejoices in an early and regular monsoon, is enough to explain a low percentage of cost, for were we to enter all our forests in the same way, our percentage, though it could not be so small as "2 annas," no protective works of any real use in bad areas being possible at that rate, would yet be less than is given for any other province in India. Form 62 refers to the official year, so that in most districts it gives the statistics for the end of the fire season of 1888 and the beginning of that of 1889. This is not satisfactory, and the Conservator hopes shortly to propose means of maintaining a better record. We could not give returns up to 30th June as is done in the Bengal provinces, because sometimes our fire season extends to long after that date, but possibly it may be found best to give returns for the calendar year and so for a full season, or to omit the returns from the annual report and report specially in the autumn.

The total expenditure on "fire-protection" (A VIII-E) was Rs. 14,216, the estimate having been Rs. 13,900.

(d) Grazing.

77. The scarcity towards the end of the year has made it necessary to open some of the reserved forests to free grazing in *Ganjam*. In the Pálkonda forests of *Vizagapatam*, the Agent found it necessary to close the reserved forests, especially against cattle from the Chicacole side. The Peddapalle reserve has, of course, been closed, as what it requires for some time is absolute rest.

78. In *Godávari* grazing dues were collected in Coringa reserve. The Devancheruvu forest has been closed, and others, like those in Ellore, must be similarly treated as soon as the final notification constituting them reserved forest issues.

79. The sales of the grazing in *Kistna* realized Rs. 49,442. Some of the important reserved forests were closed, and in all reserved forests the admission of goats was stopped. In *Nellore* the grazing revenue was Rs. 14,769, showing an increase of Rs. 2,000 on last year.

80. In *Cuddapah* the reserved forests and proposed reserved forests whose settlement is complete were closed—other forests were left open for grazing on payment, half rates being charged in the Pullampet and Ráyachóti taluks and full rates in the rest. The Collector says that "the number of permits issued (13,061), when the cattle of the district are numbered by hundreds of thousands, shows that very little need is felt of the grass in reserves. There is such a wide acreage of cultivable, but uncultivated land of poor quality, more especially in the sub-division, which is used for grazing, that the reserves will not be much used or needed for a long time to come."

81. In *Kurnool* the system started last year, and described in the Annual Report, was continued, 75,134 head of cattle being grazed as against 72,659 last year. Half rates were charged in the Nallamalais, which is a rise on the previous year when quarter fees were levied.

82. In *Bellary* grazing was charged for in reserved lands, it being free in others. A considerable amount of grass was removed on payment of low rates. In *Anantapur* grazing fees were introduced from 1st August in reserved lands at half rates. It is to be regretted that the Muchukóta forest, which had been closed for so many years, was thrown open, apparently, under a mistake.

83. In *Nílgiris* full rates were charged in the forests of the settlements of Ootacamund and Coonoor and one-fourth rates in Kótagiri, Kullar, Melúr and South-East Wynaad. The revenue for the year was considerably improved, being Rs. 2,123 against Rs. 474 last year.

84. The total revenue from grazing and fodder grass was Rs. 77,459 as against Rs. 59,773 in 1887-88. The introduction of grazing restrictions and payments is only being done by very slow degrees and cautiously: eventually, the revenue ought to be considerable, but many of the reserved forests will require absolute rest or so much rest as is compatible with the settlement, for, except in the remote forests in such districts as Godávari and Nílgiris, the reserved forests of the Northern Circle are almost throughout suffering from excessive grazing and the burning, lopping and other bad treatment which used to accompany it.

(*c*) *Natural Reproduction.*

85. In the Sál forests of *Ganjam* natural reproduction is always good as it is in the ironwood forests of *Godávari*. It is reported that 1888 was a year of abundant seed in Ganjam, but that in 1889, the present year, a year of drought and scarcity, the flowers of the Sál have almost failed.

86. From *Kistna* it is reported that "there is no natural reproduction in the forests open to grazing" which confirms the Conservator's remarks in para. 84 as to the necessity of closing reserved forests in such districts as Kistna. In those which were closed, the report is that the good effects of exclusion of cattle are plainly visible.

87. From *Nellore* the District Forest-officer reports that the system of cutting the roots of Narudu (*Pterospermum suberifolium*) trees introduced by Mr. Vincent in 1886 at Strírharikóta has been most successful, numbers of good straight 8-10 feet poles having come up around the parent trees. He also reports that the coppicing of the Nerudu (*Eugenia jambolana*) and Chikreni (*Albizzia amara*) trees has been very successful, and good poles, such as pollarding could not give, have resulted. It has also been ascertained this year that casuarina coppice is much more successful where there is side shade, *i.e.*, where only one or two trees are cut here and there than where clean cuttings have been carried out.

88. As from *Kistna*, so it is reported from *Kurnool* that there is little or no natural reproduction in areas open to grazing or liable to be burnt. On the other hand the Conservator is glad to be able to report the great improvement which he has noticed after an absence of nearly two years in the forest growth on the hills of *Cuddapah*. This is chiefly due to fire-protection and the exclusion of cattle for a while from reserved forests. So, too, in *Bellary* and *Anantapur* the improvement in the forests is noticeable, and if only it can be laid down that certain areas are to be definitely and permanently protected for a series of years and not thrown open

without reasons of the utmost urgency, he believes that before long a very marked change will be made in the scenery of those districts.

89. In Nílgiris the natural reproduction in areas which, like Lamb's Rock Reserve, Ghât Reserve and Longwood, have been cleaned of *Strobilanthes*, brambles and similar impediments is extremely good. So, too, is the coppice growth in cleared shola areas in Cairn hill, Coonoor peak, &c. The reproduction of Eucalypti, both from coppice and by self sown seedlings, is very good, but the *Acacia Melanoxylon* still refuses to reproduce as well as might be desired. The growth of seedlings and shoots in thinned areas in Mudumalai is reported to be good.

(*f*) *Artificial Reproduction.*

90. Form 60 gives the area of *plantations* as well as the record of *cultural operations* for the year.

91. *Plantations.*—The chief plantations in the circle are—

(1) The casuarina plantations in Nellore.
(2) The Australian plantations and mahogany plantation in Nílgiris.
(3) The old mixed plantations in Cuddapah.

92. The areas in *Godávari* and *Kistna* are mostly small patches of plantation, the work of the Jungle Conservancy Department previous to 1883. They are maintained, and, as time and funds allow, are being gone over and put in order. After the completion of settlement work more attention will be paid to them and endeavours made to bring them under proper systematic working like the plantations of Nellore and Nílgiris. Small addition of 10 acres of casuarina was made in Gopavanipalem and 10 acres of casuarina and Tella maddi (*Terminalia Arjuna*) in Kanukolu. Vacancies were filled up in the "Weld" plantation at Bandar mostly with Tella maddi, Neredu, Sissu (*Dalbergia Sissoo*) and edible date. In Bápatla 5 acres of old casuarina were cleared and the material cut, sold.

93. The deductions made from the cost of the Dugarazpatam, Kottapatam and Tamminapatam plantations in *Nellore* of Rs. 227, 117 and 115, respectively, represent amounts erroneously entered last year, as the disbursements were not actually made till April 1888. The deductions of areas are due to rectification to exclude areas which failed in the cyclone of November 1886 or were eaten off by caterpillars in 1887-88. The Survey Department have promised to survey these plantations this year, when we may, it is to be hoped, obtain quite correct figures and be enabled to revise the working plans.

94. The cuttings in the Nellore plantations were still confined to the windfall wood caused by the 1886 cyclone. The outturn was—

	TONS.
Dugarazpatam	503
Kottapatam	194
Royalpalem tope	13
Total ...	710

and the amount realized was Rs. 3,560. Additions were made of 80 acres in Dugarazpatam, 50 in Kottapatam and 20 in Tamminapatam.

95. The Conservator has read with interest the remarks made in para. 24 of last year's report on the damage done by insects to seedlings in the plantations, and he has inspected some of the areas so damaged. During the year under review there has been little complaint. He is inclined to agree with Mr. Peet in his opinion that casuarina cannot be grown indefinitely on the same land, but would remark that Mr. Vincent had already pointed this out, when he showed that after clear cuttings the seedlings replanted on the areas cut over were only successful in the immediate vicinity of the wells. Mr. Gamble is decidedly of opinion that it will now be well to endeavour to introduce an admixture of broad-leaved trees and transform the older parts of the plantation which have already been cut into mixed forests with casuarina around wells, and broad-leaved trees, such as Cashew, Korkapillay (*Pithecolobium dulce*) Kanuga, Nerudu, &c., between them. This year one or two compartments will be

taken in hand and results reported. He also considers it desirable to abandon the present system of clear cuttings in favor of group cuttings in which, instead of one year, several years are allowed for the regeneration of a compartment. In this way better coppice reproduction may be expected, and every endeavour will be made to secure a good advance growth by degrees so that the final cutting may not see the ground clear, but already provided with new growth. All this will necessitate the revision of the working plan which will be done directly the surveys are completed. For the purpose of the working plan the areas of Dugarazpatam, Kottapatam, Tamminapatam, Utukur and Varani which are all comparatively near together will form a working circle of about 2,000 acres. The Conservator is glad to be able to report that the plantations made since 1883 are all looking remarkably well where they were not damaged in the cyclone.

96. In the *Cuddapah* plantations the double entry under "Plantations" and "Cultural operations" has been done away with for the principal areas. These plantations, especially Uparapalle, Reddipalle and Pullampet, are large areas of very poor soil upon which in former years experiment was made to see how far forest trees could be successfully reared on such land. Considering the quality of the land, the experiments must be called successful. There are naturally vacancies, and the ground is still rather hard and bare in places. This is being remedied by sowings of "Tangedu" which are generally doing well, and by filling vacancies where possible. The Kodur plantation is chiefly a fine piece of red sanders unfortunately only too small in area. The Kamalapuram plantation is chiefly babul, but by degrees the sandy wastes included in the reserve on the banks of the Pennér and Papagni rivers are being planted up with palmyra, which is doing very well.

97. In the *Nílgiri* plantations, work has, for some time, been confined to the planting of vacant spaces with coniferous trees, or with indigenous shola plants. The planting of *Eucalyptus Globulus* or Acacias is confined merely to filling blanks in existing areas which there is no intention of extending.

98. The year was an exceptionally unfavorable one for planting works owing to the failure of the 1888 monsoon, so that much less planting work was done than had been intended, and some of the previous young plantings suffered a good deal. Still, the appearance of the conifer plantations (chiefly cypress and *Frenela* in Cairn Hill, *Cryptomeria* and *Frenela* in Aramby, and cypress and *Frenela* in Coonoor peak is good and shows that the staff have taken pains with their work.

99. The chief planting work of interest in Nílgiris is the mahogany plantation at Kullar at the foot of the Coonoor ghât. The 92 acres planted up in 1886 in compartments 1 to 5 of block IV in bamboo forest are looking well, the better plants being already 10 to 15 feet high in moist and 4 to 7 feet in dry localities. Block II, compartments 1, 2 and 3, being too dry for mahogany have been planted with Teak, Vengai and *Berrya*, all of which are doing well though a good deal hampered by the luxuriant growth of creepers, such as the climbing Acacias. The mahogany experiment is being continued, both with the ordinary mahogany and the new species (*Swietenia macrophylla*) which has the great advantage of a speedy growth and the capability of producing good seed in abundance, which the *Swietenia Mahogani* does not.

100. *Nurseries.*—The *Nílgiri* nurseries at Lovedale (7,000 feet), Sim's Park (5,500 feet) and Kullar (1,500 feet) are all in good order and well kept. A small nursery has also been made at Tippacadu (3,000 feet). That in Cairn Hill reserve will now be abandoned as no longer required.

101. In the *Cuddapah* district an excellent nursery is maintained at Ballipalle, chiefly for the sake of the edible dates, of which there is a fine supply of offsets of large size (received in 1886 from the Persian Gulf) to be used as propagating stock. Teak and other seedlings are also reared for filling vacancies in the adjoining working circle. There is also a useful nursery at Horsleykonda (4,500 feet) and a small one at the Peddagadi not far from Cuddapah.

102. In *Nellore* the nursery at Dugarazpatam is used for rearing edible dates, but of late the water-supply has got very brackish, and it will have to be transferred to a higher site.

103. In *Bellary* a nursery for edible date is maintained at Ramandrug in a good site, but the available area is very small. There is another small one at Hampi.

Cultural operations.

104. The Mojagodo plantation in *Ganjam* may now be omitted, for the trees have grown big and no further expenditure is necessary apart from the general management of the Gullery reserved forest. The average girth increment of the teak trees for the year was 2·13 inches. So, too, the areas in *Vizagapatam* and *Bellary*, which are not plantation works at all, but areas of naturally grown sál and babul, respectively, need no longer be entered.

105. The Conservator is sorry to find that the recommendations of his inspection note of March 1887, regarding the restocking of the Bezváda hill in *Kistna*, were not carried out. The expenditure entered is the pay of a watcher in charge who has to look after and water sundry mahogany, date and other seedlings at the foot of the hill.

106. In *Nellore* the planting of vacant spaces in the Stríharikóta forest with various trees has been continued. The work is purely experimental to ascertain what species can be easily grown and will thrive. It is too early to report results of value, but it may be mentioned that so far mahogany has done as well as anything, but requires too much special care. In future, however, it will be better to adhere to planting those species which are indigenous in the locality.

107. In *Cuddapah*, owing to press of other work, little was done but the maintenance of existing plantings and the work of sowing palmyras on the sandy banks of the Papagni and Pennér rivers, a work which has been very successful. In compartment 6 (*b*) of the Ballipalle working circle vacancies were filled with a large number of red sanders, teak, satin-wood and other seedlings, which, it is hoped, will do better than similar works did in previous years.

108. In *Nílgiris*, blanks at Lovedale were planted with *Bucklandia populnea* and shola trees. In the Ghât Reserve, a large blank of 12 acres has been filled up with *Casuarina suberosa* and shola plants which are all doing remarkably well, as are the similar blanks in Lamb's Rock forest and Longwood. The Sim's Park block in Coonoor is being utilized as an experimental garden, and plants of Eucalyptus of authentically named kinds have been planted in squares, as well as plants of *Bucklandia* and maple from Bengal, of *Podocarpus* and *Curtisia* from the Cape and other trees, and the whole is very carefully kept labelled.

109. The record of *experiments* will be found in an appendix A. The Conservator desires to say that he regrets that last year the Government should have expressed themselves as considering the results of artificial reproduction in the circle as discouraging, for he cannot agree in this opinion. The plantations of Nellore, Cuddapah and Nílgiris will bear comparison with any in India, due consideration being given to their circumstances. What is, and always will be, discouraging, is the result of desultory attempts to grow trees on a small scale often with an untrained staff, or, what is worse, an indifferent and careless staff (see para. 67 of the Annual Report for 1885-86). Such cases as those of the Nellore dates referred to in Appendix A and as where, lately, under instructions from the Board of Revenue, seeds of certain species of Eucalyptus were sent in small packets to all District Forest-officers, for trial are among those which can be called discouraging, for in several districts there are no nurseries like those of the Nílgiris and Cuddapah, and temporary ones have to be made and a gardener entertained who is sure either to over-water or not water at all and the plants fail and the expenditure is wasted. In such cases distribution should, the Conservator submits, be made through him and the seeds sent to some one who has the necessary means and the knowledge required for making the experiment under the best possible conditions and with due economy, and expenditure should not be incurred on plantations or experiments unless there is a very clear prospect of success.

Topes.

110. Form 61 gives the number and area of topes in the circle. Considerable progress has been made during the year in the inspection, survey and record of these useful little plantations. The Conservator hopes, before long, to have ready in his office the records, maps and statement of condition of all topes in his circle. Such

records are nearly ready for Cuddapah, Kurnool and Kistna, Nellore and Anantapur are still somewhat backward. The Cuddapah topes are all being taken in hand for the repairs of the fences and wells and the filling of vacancies, and the same will be done in all districts in those topes which are worth maintenance.

111. The total expenditure on plantation work was Rs. 17,934 out of a sanctioned estimate of Rs. 21,200.

The amount is divided thus :—

	Rs.
Plantations Form 60	14,208
Cultural operations Form 60	1,511
Topes Form 61	2,215
	17,934

(*g*) *Works of Improvement.*

112. Creepers were cut systematically in those compartments in the *Ganjam* forests in which fellings were undertaken. In *Nellore* the Narudu trees in which root cuttings had been made (see paragraph 87) were fenced at a cost of Rs. 13.

113. In *Cuddapah* about 9 acres of forest were cleared of creepers at Horsley-konda at a cost of Rs. 12-8-0. This is a very little piece of work, and more work of the kind should have been done.

114. The cleanings in the Sandúr forests of *Bellary* were continued, but not in a satisfactory way, nor fully according to the provisions of the working plan. The Conservator found that in each year the compartment mentioned in the working plan had been taken in hand, but instead of the whole area only a small corner done and the rest left untouched—a style of doing work of which he cannot approve. From *Anantapur* it is reported that creepers are being systematically cut by the protective staff. This is quite right and should be done elsewhere.

115. In *Nílgiris* alone has any really satisfactory work in the way of cleanings and creeper cutting been done. The following were the smaller works done :—

Forest.	Area.	Cost.	Revenue.	Surplus or deficit.
	Acs.	Rs.	Rs.	Rs.
Sim's Park	20	45	47	+ 2
Town shola	11	85	97½	+ 12½
Longwood	33	129	52	— 77
Cairn Hill	23	115	131	+ 16

"*Loranthus*" parasites and creepers were cut in Sim's Park reserved forest at a net profit of Rs. 2. Similar work in "Town shola" was profitably carried out at a net profit of Rs. 1-2-0 per acre. In the Longwood reserved forest at Kótagiri 33 acres were cleaned at a cost of Rs. 3-15-0 per acre. There not being so good a demand for such small material at Kótagiri as at Coonoor, the material only sold for about Rs. 1-9-0 per acre, still even this is satisfactory, for in most districts no sale at all can be got for such material. In Cairn Hill reserved forest 23 acres were cleaned in block IV at a net profit of Rs. 16. These important cleaning works, the results of which are most beneficial to the forests, require to be considerably extended by degrees.

116. In the Barliyar working circle, in which improvement thinnings accompanied by creeper cuttings are being carried out, 60 acres were cleared of creepers at a cost of Rs. 390 in block V. At the same time 360 trees were thinned out at a cost of Rs. 252, the cut material either realizing or being valued at Rs. 465. Block II, compartment 1, was also thinned, 27 acres at a total cost of Rs. 223-8-0, the material cut being valued at Rs. 102-8-0. Both these areas are to have all blank spaces filled up with teak and mahogany during the current year.

117. In the Mudumalai leased forest, block II, compartment 3, 93 acres was thinned in improvement thinnings at a cost of Rs. 648, the material so far sold realizing Rs. 412. The chief produce was 1,443 teak, vengai and mutti poles.

118. In the Moyar reserved forest, dead-wood was cleared out to the extent of 11,424 cubic feet of teak and 383 cubic feet of vengai which together realized Rs. 1,846. This important work should be continued yearly over all such forests.

119. It will be seen that, with the exception of in the Nílgiris, the important works of cleaning and creeper cutting were not sufficiently attended to; but the chief cause of this is the heavy work in and the delay of settlement and demarcation and the weakness of the staff.

The total amount spent on "other works" A. VIII (*f*) was Rs. 4,987 chiefly in Cuddapah and Nílgiris, against a sanctioned estimate of Rs. 3,150. The chief expenditure was on temporary establishments.

Communication and Buildings—Roads.

120. In *Ganjam* 3½ miles of the cart-road from Kulada to Tilsingi was completed at a cost of Rs. 774, or an average of Rs. 221 per mile. The roads previously done are—

	Miles.	Rs.	Rate. Rs.
Gullery to Dodorolunda	6	2,280	380
Tilsingi to Chondergiri	6	1,950	325

121. In *Godávari* the progress of road work is thus shown:—

Name of road.	Previously done.		Done in 1888-89.		Total.		Remarks.
	Length.	Cost.	Length.	Cost.	Length.	Cost.	
	MILES.	RS.	MILES.	RS.	MILES.	RS.	
Jirigupa-Ramdeopet	3¼	258	1¾	174	5	432	
Erguralpali-Bhandarguriam.	4¾	198	4	444	8¾	642	
Kunavaram Tatlunka ..	2¼	422	5¾	971	8	1,393	
Total, Upper taluks ..	10¼	878	11½	1,589	21¾	2,467	or Rs. 113 per mile.
Peddamamidi-Timmapur ..	..	..	6	427	6	427	} or Rs. 64 per mile.
Timmalayapalem-Sudikonda.	..	..	4	214	4	214	
Devancheruvu inspection paths.	..	..	7½	260	7½	260	or Rs. 34 per mile.
Total, Lower taluks ..	..	..	17½	901	17½	901	

So that during the year 29 miles were done at a cost of Rs. 2,490, showing good progress. The roads in the upper taluks will still require some levelling to be made right.

122. In *Kistna* 8¼ miles of the repairs to the old cart-road from Bollapalle to Remedieherla through the Bollapalle reserved forest were completed at a cost of Rs. 200, the total spent being Rs. 212. In *Nellore* there were no works.

123. In *Cuddapah* the following work was done:—

Name of road.	Previously done.		Done in 1888-89.		Total.	
	Length.	Cost.	Length.	Cost.	Length.	Cost.
	MILES.	RS.	MILES.	RS.	MILES.	RS.
Ballipalle Hill road	13	2,096	2	560	15	2,656
Peddaralasagadu	2¼	754	3	630	5¼	1,384
Bokkakanama	2½	100	..	..	2½	100
Yerrapenta	6	770	..	..	6	770
Lankamalai	2¾	244	4	315	6¾	559
Rajinanipenta	3¼	1,231	2	656	5¼	1,887
Kavakona	7½	780	..	..	7½	780
Horsleykonda	4	200	..	..	4	200
Total ..	41¼	6,175	11	2,161	52¼	8,336

So that during the year 11 miles was done at a cost of Rs. 2,161, or Rs. 197 per mile. There were also 2 miles of Yerrapenta road done, but not paid for during the

year, so it is left to be entered in the report for 1889-90. The amount spent, which includes some small minor items, was Rs. 2,448.

124. In *Kurnool* the following work was done during the year :—

Road.	Length.	Cost.
	MILES.	RS.
Digumetta	3	355
Mahanandi	¼	44
Siddapuram-Velgode	1	160
Total ...	4¼	559

which is a small outturn of work for a district which requires forest roads so badly as Kurnool.

125. In *Bellary* no roads were made during the year. But it is useful to record here as for other districts the work done to date which is—

	MILES.	RS.
Ramandrug boundary road	10	755
North-east range	2¾	308
Total ...	12¾	1,063

The Conservator regrets to have noticed that even the repairs so necessary for the maintenance of these roads had not been carried out this year.

126. In *Anantapur* also was no work done during the year. The work to date has been—

	MILES.	RS.	
Muchukóta inspection roads	4½	170	1884-85.
Bukkapatnam-Narsimpalle	1½	455	1886-87.
Total ...	6	625	

These Muchukóta inspection roads were, the Conservator is glad to report, excellently laid out and made by Mr. Lodge ; and, as also the demarcation lines, are a model for what such works should be.

127. In *Nílgiris*, the Conservator regrets to say no information has come which can give, as for other districts, the cost of previously made roads, but the following work was done during the year—

	Reserved forest.	MILES.	RS.	
New roads ...	Coonoor peak	¼	126	Burrows' road—carts.
	Rallia	¼	139	Carting road.
	Kullar	1	30	Bridle path.
Metalling ...	Woodhouselee road ...	1½	805	of which Rs. 257 during the year.
	Aramby lower road ...	1¼	742	„ „ 313 „
	Cairn Hill, Jago's road ...	1	799	„ „ 370 „

in addition the Rallia road was repaired for Rs. 175, the Longwood road for Rs. 94, the Mudumalai-Benné road 19 miles, with 7 bridges for Rs. 466, and other small sums were spent in repairs to other roads of smaller importance. The total expenditure was Rs. 2,729.

128. The Conservator regrets that in some districts so little work should have been done in this important section. Good and convenient roads are an absolute necessity, not only as all important for improving the revenue as allowing purchasers to enter the forests more easily, but for inspection, for fire-protection and for the sub-division into compartments, and better arrangements should be made to utilize budget provisions. The total amount spent during the year on roads was Rs. 9,234, while the sanctioned estimate was Rs. 15,000 and revised estimate Rs. 12,000.

Tramways.

129. The following is extracted from the district report :—

" The Fowler's Portable Tramway now in use in this district is in good order and did good work. The tramway was used only in Kottapatam plantation. A total quantity of 2,995 tons of wood was conveyed to the basin at an aggregate cost of Rs. 411, which gives an average of Rs. 0-2-2 per ton. It must, however, be mentioned that the above average does not represent

the total cost of carriage from the plantations to the basin, but the amount spent this year, as a portion of the wood had been removed and stalked about half way between the plantation and the basin in the previous year. The distance between the two points is more than 2½ miles. Consequently the wood has to be removed by instalments, which necessarily increase the cost, as the line has to be broken up and relaid and wood loaded and unloaded each time. In spite of this disadvantage, the average cost of carriage per ton for the total distance is Annas 6 against Rs. 2-8-0, which hitherto had to be paid for carts."

A length of 5½ miles of line has been received since the close of the year for use in the fuel works of the Stríharikóta reserved forests.

130. The Conservator is anxious to utilize still more the great facilities which these lines give for economy in transport. A few small lengths in the Nílgiri working circles would be very valuable, and in Ganjam, Godávari and Kurnool the use of portable tramway lines would do very much to improve the extraction of material, the difficulty of which is now in the cost of labor and trouble of procuring carriage. With reference to the remarks in paragraph 15 of G.O., No. 153, of 5th March 1889, and the circular of the Inspector-General of Forests with the Government of India, No. 6 of May 2nd, 1889, the Conservator has only recently returned from leave, so he omits further remarks at present, but will pay attention to the subject during his tours this year. In our present state, with other works to distract the District Forest-officer's attention money might be wasted if tramways were set up, without very full previous consideration. But the Conservator has indicated a few places where tramways may be useful, and he would add that in his opinion it would be a great thing if one could be made from Gopalpore to Aska and Russellkonda in Ganjam. It would probably pay financially and would be invaluable to the Department. He suggests this as a famine work or a work for the Local Board.

131. *Canals.*—In the Kistna district a sum of Rs. 50 was spent in improving the creeks in the Bandar Fort reserve to facilitate the navigation of wood boats.

Houses.

132. *Ganjam.*—The following is the list of houses under the department at present:—

	Value. RS.
Russellkonda Inspection house (brick)	1,500 (old.)
Mojogodo Forest-house (brick)	500
Rambha Forest-house (wood)	233 (not quite finished.)
Gullery Forest-house (stone in mud)	570
Chondorgiri Forest-house (wood)	714 (not quite finished.)
Suradá Forest-house	350
Gayagonda Range-house (brick)	523 (not quite finished.)
Tilsingi Forest-house (wood)	400
Jagannathprásad Range-house (brick in chunam)...	525 (finished.)
Khariguda Forest-house (wood)	257 (finished.)
Berhampore Range-house (brick)	924 (bought in 1887-88.)

During the year Rs. 2,575 were spent, of which besides small items, Rs. 714 on Chondorgiri, Rs. 383 on Tilsingi, Rs. 232 on Rambha, Rs. 60 on Khariguda, Rs. 915 on Jagannathprásad and Gayagonda. There are also several smaller inspection sheds as well as Forest-guards' houses.

133. *Vizagapatam.*—The sum of Rs. 37 spent, was for two small sheds for the Ranger's use in the Pálkonda hills.

134. *Godávari.*—In Rékapalle there is one Forest-house, value Rs. 327; and a sum of Rs. 338 only was spent out of a sanctioned amount of Rs. 1,000. This is not as it should be. Houses are urgently wanted in the upper taluks and the District Forest-officer's own interest should have led him at least to utilize the budget provision.

135. *Kistna.*—The Kondavid bungalow was purchased for Rs. 507 during the year as a Forest rest-house. A sum of Rs. 1,307 was spent, the balance being chiefly on Forest-guards' houses and repairs to the Vinukonda range office.

136. *Nellore.*—The Udayágiri hill bungalow was purchased during the year for Rs. 553. The only other house of any importance is the Range-office at Stríharikóta.

137. *Cuddapah.*—The Ráyachóti range-house was completed during the year for Rs. 241, and produce depôts built at Kurapalle and Badvél for Rs. 250 and Rs. 185,

respectively. The Kódúr range-house, the Horsleykonda range-office and other buildings were repaired and wells dug, the total expenditure being Rs. 1,806 out of a sanctioned amount of Rs. 2,000.

The principal houses are—

	Value. Rs.
Kódúr	2,900
Horsleykonda	4,000
Sanipaya	1,900
Mogilipenta	1,000
Ballipalle	600

and there are range-houses at Kódúr, Rájampet, Sidhout, Badvél and Ráyachóti.

138. *Kurnool.*—The expenditure of the year was Rs. 5,023, of which Rs. 4,137 for the completion of the Head-quarters bungalow at Nandyál. The inspection houses at Rollapenta and Bainuti were greatly improved during the year by the addition of thatched roofs, doors and windows and out-houses at a cost of Rs. 174 and Rs. 78, respectively. The rest huts at Pecheruvu, Ullada and Chintal were repaired as well as several tannahdars' huts, five new huts being built in Sirvel taluk at a cost of Rs. 12-8-0. The chief houses are—

	Value. Rs.
Head-quarters, Nandyál	11,000
Rollapenta	1,200
Bainuti	1,200

139. *Bellary.*—A sum of Rs. 296 only was spent during the year, partly to finally complete the Donemalai house (total cost Rs. 634), partly on a tool shed in Sandúr, and on smaller works.

140. *Anantapur.*—Rs. 678 were spent, chiefly on materials for the Konapanainapalle house and the out-houses of the Head-quarters bungalow. As Rs. 2,000 was sanctioned in the budget, the outturn of work is not creditable.

141. *Nílgiris.*—Rs. 1,826 was spent during the year, the following being the chief works :—

	Rs.
Kótagiri range-house	220
Sim's Park seed-house	265
4 Guards' houses at Rs. 110	440
4 Do. do. ,, 80	320
Repairs to range and beat-houses and huts throughout the district ...	581
Total ...	1,826

The only inspection house is that at Kullár, value Rs. 1,000.

142. The total expenditure on buildings was Rs. 14,457, the sanctioned allotment having been Rs. 13,350. The chief item was the final payments for the Head-quarter's house at Nandyál. The Conservator proposes, next year, to give a complete list of buildings under the department in proper classification. There is not sufficient information this year either in the reports or in Form 73 (*b*).

143. *Boats.*—A staff boat was purchased during the year for the use of the District Forest-officer of Kistna for Rs. 2,000. Godávari has already been supplied, while in Nellore the District Forest-officer uses the larger of the boats employed for conveyance of minor produce to Madras. In Kistna the range officers of Bandar and Bápatla are provided with small boats for inspection work, and two boats have been constructed during the year at a cost of Rs. 230 each for the Strîharikóta and Plantation ranges.

144. *Elephants.*—Four elephants were purchased during the year for Rs. 6,000 from the Commissariat Department at Secunderabad. They reached Rékapalle in October 1888, and after a little delay in preparing harness, they were set to work and dragged 249 logs to Kanslúr and 87 to Chintúr, the average distance being 10 miles.

145. The two Nílgiri elephants are always getting sick, still they have been very useful and the eldest of the calves is now able to do light work, in collecting material cut to the road sides.

The expenditure on these animals is given in Form 74.

CHAPTER V.

YIELD AND WORKING.

Departmental Work.

146. Form 68 shows the number of trees felled by departmental agency during the year. The chief items were—

Teak	394	Nílgiris.
Sál	3,705	Ganjam.
Ironwood	138	Godávari.
Eucalyptus	10,816	Nílgiris.

the teak trees being chiefly cut in Benné reserved forest, where, too, were felled several vengai, blackwood and mutti; the sál in various forests in Gúmsur under the plans of operations; the ironwood in the Rékapalle forests and the Eucalyptus with some Acacia in the Nílgiri hill plantations. These last were for fuel, the rest for timber. The total number is 2,200 more than last year.

147. Form 69 shows the departmental collection of timber and other produce for the year. The amount collected was—

District.	Timber.	Fuel.	Bamboos.	Sandalwood.	Grass.	Minor produce.
	C. FT.	C. FT.	NO.	MDS.	MDS.	MDS.
Ganjam	*118,558	123,271	† 12,620	..	..	41
Vizagapatam	144	..	..	..	..	..
Godávari	4,113	756	..	..	..	..
Kistna	3,262	10,050	..	..	..	..
Nellore	..	237,291	..	..	..	2,498
Cuddapah	97,546	13,776	7,461	..	..	1,174
Kurnool	2,281	1,239	..	..	..	970
Bellary	4,472	91,265	58,187	..	..	11
Anantapur	1,575	440	..	..	..	377
Nílgiris	28,490	390,372	..	1,714	..	3,467
Total ..	260,441	868,460	78,268	1,714	..	8,538

* Note.—Add transferred to forest depôts 37,226 cubic feet, total 155,784.
† Note.—Add do. do. 11,030 do. total 23,650.

148. Subjoined is a comparison of the yield for three years. The figures adopted for 1886-87 and 1887-88 are those given in the outturn statements submitted with this office letter No. 460 of 3rd May 1889 :—

	1886-87.	1887-88.	1888-89.
Timber .. .. c. ft.	52,530	185,512	260,441
Fuel .. .. c. ft.	1,202,092	817,262	868,460
Bamboos .. .. No.	33,725	102,508	78,268
Minor produce .. .. Mds.	14,431	4,521	8,538
Sandalwood .. .. Mds.	2,000	1,665	1,714

149. Form No. 70 shows the receipt and disposal of timber, &c., in sale depôts. The amounts received and disposed of during the year come to—

District.	Timber.		Fuel.		Bamboos.		Minor produce.	
	Received.	Disposed of.	Received.	Disposed of.	Received.	Disposed of.	Received.	Disposed of.
	C. FT.	C. FT.	C. FT.	C. FT.	NO.	NO.	MDS.	MDS.
Ganjam	32,556	18,532	3,533	2,465	..	..	40	807
Vizagapatam	144	144	..	..	..	..	..	..
Godávari	6	50	..	..	..	..	..	..
Nellore	..	..	222,959	108,528	..	..	535	615
Cuddapah	91,265	15	196	196	..	..	2,529	4,913
Kurnool	..	..	..	..	..	..	..	1,530
Bellary	..	..	6,451	4,830	..	..	..	lb. 20
Anantapur	..	2	..	..	..	..	277	2,000
Nílgiris	3,198	3,502	140,432	133,486	..	..	22	..
Total ..	127,169	22,245	373,571	249,505	..	..	3,403	9,866

The most noticeable item is the failure in Cuddapah to sell the red-sanders wood collections of the year. When the tenders were opened, it was found that there was only one, viz., for Rs. 13-8-0 per ton. The District Forest-officer, thinking that he ought to get at least Rs. 17 as last year, withheld sale. On this the Collector of Cuddapah, Mr. E. J. Sewell, has remarked :—

"When the matter came to my notice from the District-Forest officer's diary, I at once pointed out that the Budget revenue ought to be realized even if the wood, &c., had to be sold at a lower price than usual. I also think that a sale at a low price one year is often recouped in other years by the competition which it leads to. The profits made by the contractor who has bought cheap attract attention and lead others to come and compete at the next year's sales."

and the Conservator agrees in his remarks, and he considers that it is better and more dignified for the Government to sell its produce yearly at the market rate rather than to keep it back on account of a depression. Since then the price has gone still lower, and it is to be feared that we shall scarcely get more than Rs. 10 per ton. Had the red-sanders wood of this year been sold at Rs. 13-8-0, the gross revenue would have reached nearly 6½ lakhs. No doubt the District Forest-officer thought he was acting for the best, but it is as well to put on record that the Collector and Conservator consider that he ought to have accepted the tender. The short sales in Ganjam are due to the difficulty of obtaining a local market, and especially of selling sleepers since so many of the Indian Railways have now taken to using iron almost exclusively. There is, however, a stock of about 8,000 sleepers on hand; if these had been sold, the financial results of Ganjam would have been converted from a deficit into a surplus.

150. Subjoined is a statement of receipts in and sales from depôts for three years.

	1886-87.		1887-88.		1888-89.	
	Receipts.	Disposals.	Receipts.	Disposals.	Receipts.	Disposals.
Timber .. .. .. c. ft.	115,850	107,650	146,119	126,137	127,169	22,245
Fuel .. .. .. c. ft.	351,700	290,100	23,875	318,725	373,571	249,505
Bamboos .. .. .. No.	1,200	1,200	110	110	..	..
Minor produce .. .. .. Mds.	52,110	46,170	6,852	3,802	3,403	9,866

There is not much to say about these returns. The Conservator agrees with Mr. Horsfall, the Collector, in regretting the necessity for departmental operations in Ganjam for they are not very satisfactory; but if we cannot induce middlemen to come forward and purchase timber in the forests, we must, in order to make the annual yield available and the forests give their proper amount of revenue, undertake the work ourselves. So soon as it is possible, the system of departmental work should again stop, but there seems little prospect of this. The Conservator proposes to see what can be done by means of tramways to reduce the difficulties of transport and obviate the trouble it takes to induce sawyers to work in the forests, and in this connection begs to invite attention to his paragraph 130. The operations in Nellore and Nilgiris were satisfactory.

151. Form No. 71 shows the sales of timber first from depôt, secondly from the forests, thirdly and fourthly from drift and confiscated wood. The following abstract shows the sales of the year :—

Timber.

District.	Depôt.		Local.		Drift.		Confiscated.		Total.	
	C. FT.	RS.	C. FT.	RS.	C. FT.	RS.	C. FT.	RS.	C. FT.	RS.
Ganjam	12,418	7,123	679	80	..	..	97	40	13,194	7,243
Vizagapatam	144	38	..	..	..	..	2,160	68	2,304	106
Godâvari	50	28	..	..	15,467	8,227	1,680	75	17,197	8,330
Kistna	..	..	3,261	20	200	30	2,967	219	6,428	269
Nellore	..	..	..	..	..	..	280	38	280	38
Cuddapah	15	18	1,446	321	..	..	2,950	709	4,411	1,048
Kurnool	..	..	790	432	..	..	30,175	1,761	30,965	2,193
Bellary	..	..	4,472	687	..	..	240	13	4,712	700
Anantapur	..	..	1,575	81	..	..	62	10	1,637	91
Nilgiris	2,166	367	28,661	10,492	..	..	15	1	30,842	10,860
Total ..	14,793	7,574	40,884	12,113	15,667	8,257	40,626	2,934	111,970	30,878

so that the price obtained on the whole was a little over 5 annas per cubic foot solid.

Fuel.

District.	Depôt.		Local.		Drift.		Confiscated.		Total.	
	C. FT.	RS	C. FT.	RS.	C. FT.	RS.	C. FT.	RS.	C. FT.	RS.
Ganjam	2,462	142	13,345	30	..	..	196	19	16,003	191
Vizagapatam	..	..	..	..	..	..	603	14	603	14
Godávari	..	..	486	18	6	1	716	34	1,208	53
Kistna	..	..	9,990	39	..	..	490	29	10,480	68
Nellore	108,233	20,962	177,230	20,691	..	..	..	..	285,463	41,853
Cuddapah	196	21	11,452	116	..	..	1,492	70	13,140	207
Kurnool	..	..	200	44	..	..	3,955	159	4,215	203
Bellary	4,830	341	89,315	1,494	..	..	..	..	94,145	1,835
Anantapur	..	..	80	1	..	..	220	9	300	10
Nilgiris	117,318	11,281	125,914	6,271	..	..	114	9	243,346	17,561
Total ..	233,039	32,747	428,072	28,904	6	1	7,786	343	668,903	61,995

so that $1\frac{1}{2}$ annas per cubic foot stacked was realised. The chief departmental fuel works are in Nellore and Nilgiris. In the former there was a slight falling off in price owing to the large amount of stormwood still in the market. In the latter the rates do not vary according to the market but are fixed. Sales were good, and the works well carried out. The outturn of charcoal in the iron kiln was 16 per cent., which is an improvement on the 13 per cent. of last year. This iron kiln (Système Moreau) has now been in use for over 2 years with excellent results and the Conservator proposes to indent for more for use in other forests.

Bamboos.

District.	Local.		Confiscated.		Total.	
	NO.	RS.	NO.	RS.	NO.	RS.
Ganjam	..	..	276	1	276	1
Vizagapatam	..	..	1,174	20	1,174	20
Godávari	..	..	2,260	25	2,260	25
Kistna	..	..	709	4	709	4
Cuddapah	..	..	2,495	28	2,495	28
Kurnool	..	..	607	9	607	9
Bellary	58,187	1,615	..	..	58,187	1,615
Total ..	58,187	1,615	7,521	87	65,708	1,702

The Conservator would like to see departmental bamboo collection work, which is easy, extended, as the cutting by purchasers tends to damage the clumps.

Minor Produce.

District.	Depôt.		Local.		Confiscated.		Total.	
	MDS.	RS.	MDS.	RS.	MDS.	RS.	MDS.	RS.
Ganjam	58	4	41	4	40	5	139	13
Vizagapatam	..	..	..	..	4	10	4	10
Godávari	..	..	..	..	17	6	17	6
Kistna	..	..	..	..	127	5	127	5
Nellore	610	1,045	1,774	3,141	..	..	2,384	4,186
Cuddapah	2,523	1,201	190	109	186	6	2,899	1,316
Kurnool	..	..	166	99	75	9	241	108
Bellary	lb. 20	10	54	46	92	25	147	81
Anantapur	109	132	108	96	645	861	862	1,089
Nilgiris	..	..	3,158	2,542	..	..	3,158	2,542
Total ..	3,301	2,392	5,491	6,037	1,186	927	9,978	9,356

As usual the chief collections were in Nellore (where, however, they were less than usual this year) and in Nilgiris.

Sandalwood.

	Sold locally.	
	MDS.	RS.
Nilgiris	1,792	6,965

the rate obtained was Rs. 3-14-2 per maund which is a good average and compares well with Coimbatore average rates.

152. The following statement shows a comparison of the sales for the last three years :—

	1886-87.		1887-88.		1888-89.	
	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.
		Rs.		Rs.		Rs.
Timber .. .. c. ft.	12,750	44,226	128,287	47,280	111,970	30,878
Fuel .. .. c. ft.	787,975	78,837	510,825	54,883	608,903	61,995
Bamboos .. .. .. No.	34,925	932	10,208	2,406	65,708	1,702
Sandalwood .. .. .. Mds.	1,980	9,000	1,553	5,804	1,792	6,065
Minor produce .. .. Mds.	6,705	3,872	2,992	4,920	9,978	9,356

153. Form No. 73-A shows the difference in value between the stock on hand at the commencement and close of the year in

District.	On hand at commencement of the year.	On hand at close of the year.	Difference.
	Rs.	Rs.	Rs.
Ganjam	4,590	14,374	+ 9,784
Godávari	30	..	— 30
Nellore	5,969	18,363	+ 12,394
Cuddapah	9,550	23,997	+ 14,447
Kurnool	191	..	— 191
Bellary	69	42	— 27
Anantapur	2,272	380	— 1,892
Nílgiris	1,680	2,547	+ 867
Total ..	24,351	50,703	+ 35,352

The chief stock is of sleepers in Ganjam, of fuel in Nellore and of red-sanders wood in Cuddapah.

154. The following is the outturn statement for the year as called for by Government in G.O., No. 153, of 5th March 1889 :—

District.	Outturn in cubic feet, timber and fuel.					Outturn of minor produce in maunds.					Outturn of Bamboos in number.				
	By Government agency.	By private purchasers.	By drift and confiscated wood.	By free grants.	Total.	By Government agency.	By private purchasers.	By drift and confiscated wood.	By free grants.	Total.	By Government agency.	By private purchasers.	By drift and confiscated wood.	By free grants.	Total.
Ganjam ..	241,829	1,064,159	293	9,460	1,315,771	41	..	40	..	81	12,620	1,157,538	276	31,440	1,201,874
Vizagapatam	144	318,273	2,763	27,680	348,860	..	6,121	4	..	6,125	..	227,982	1,174	83,550	312,706
Godávari ..	4,869	597,214	17,869	558	620,510	..	163,066 / * 145	17	..	163,228	..	2,008,932	2,260	..	2,011,192
Kistna ..	13,312	726,738	3,657	..	743,707	..	83,442	127	..	*83,569	..	168,570	709	..	169,279
Nellore ..	237,291	79,670	280	3,900	321,141	2,498	..	..	..	2,498	..	..	..	..	..
Cuddapah ..	111,322	2,641,292	4,442	1,840	2,758,896	1,174	93,813 / * 27,000	186	..	122,173	7,461	842,376	2,495	300	852,632
Kurnool ..	3,520	1,774,270	34,130	3,400	1,815,320	970	111,960	75	..	113,005	..	11,141	607	14,760	26,508
Bellary ..	95,737	321,792	240	480	418,249	11	2,035,221 / * 25,553	92	..	2,060,877	58,187	5,274	..	..	63,461
Anantapur ..	2,015	84,773	282	1,947	89,017	377	366,264 / * 4 392	635 / * 10	..	371,678	..	20,076	..	..	20,076
Nílgiris ..	418,862	83,582	129	1,184	503,757	3,467 / †1,714	140,438 / * 94,482	..	..	240,101	..	230,543	..	..	230,543
Total ..	1,128,901	7,691,793	64,085	50,449	89,35,228	10,252	3,151,897	1,186	..	3,163,335	78,268	4,672,432	7,521	130,050	4,888,271

* Grass. † Sandalwood.

155. *Removal by purchasers.*—Form 72 gives the sales direct from the forests. The following abstract shows the comparison with last year:—

	1887-88.	1888-89.
	Rs.	Rs.
Ganjam	15,384	14,134
Vizagapatam	5,279	6,608
Godávari	63,265	64,998
Kistna	76,524	96,613
Nellore	44,207	28,146
Cuddapah	1,12,232	1,02,734
Kurnool	75,614	1,05 059
Bellary	23,605	36,180
Anantapur	18,522	28,695
Nílgiris	9,272	12,022
Total ...	4,43,904	4,65,189

showing an increase of over half a lakh. There was a considerable decrease in Nellore and Cuddapah and a small one in Ganjam, with a rise in all other districts, especially in Kurnool and Kistna, Bellary and Anantapur. Indeed, the rise of the revenue of these two last districts is quite the feature of the year. It is almost entirely due to the sales of tangedu bark. The rise in Kistna is due to larger grazing collections, and that in Kurnool to payment for railway fuel cut by the Bellary-Kistna State Railway. The amount paid was Rs. 20,441, which was calculated at Rs. 7 per acre on 2920·35 acres.

156. One of the features of the year, as already noticed, is the increase in the revenue from the bark of the 'tangedu' shrub (*Cassia auriculata*) the sales of which were—

	Maunds.	Rs.
Vizagapatam	1,599	54
Godávari	5,244	509
Kistna	...	2,204
Nellore	...	3,451
Cuddapah	29,665	3,107
Kurnool	111,960	3,732
Bellary	109,168	8,266
Anantapur	138,900	16,990
Total ...	396,536	38.313

If we estimate 10 maunds per one rupee for Kistna and Nellore and for part payments in Anantapur we shall have a total outturn of about 500,000 maunds or about 5,500 tons and a revenue of Rs. 38,313. This is very good, but it may be doubted whether it will last. The Conservator has no doubt of the shrub lasting, but the markets are often capricious, and though apparently the Mysore tanners prefer 'tangedu' to other kinds of tan, yet in the English market it is considered quite an inferior material, giving (according to information supplied to the Conservator by Mr. Evans of Bristol) only $13\frac{1}{2}$ per cent. of tannin against $17\frac{1}{2}$ given by babúl bark, 19 by babúl pods, 20 to 40 by the barks of the wattles so extensively grown on the Nílgiris and 25 to 46 by the common myrabolams or gallnuts (*Terminalia chebula*).

157. It is difficult to estimate so nearly the amount of gallnuts sold, for in some districts the collections were departmental, in others the fruit was included in the general leases, and in one (Godávari) seigniorage was taken as it passed down the river. But so far as our returns go, the amount sold was—

	Maunds.	Rs.
I (*e*). Ganjam	57	3
Cuddapah	2,486	1,149
Anantapur	86	57
Kurnool	21	8
Nílgiris	2,821	1,769
II (*e*). Godávari	2,360	232
Total ...	7,831	3,218

In Cuddapah 7½ annas per maund was realized and in Nílgiris 10 annas.

158. The sales of minor forest produce generally have developed considerably and there is no doubt that they are still capable of much greater improvement. Of tamarinds, 53,349 maunds paid a royalty in Godávari of Rs. 3,335; but the Nellore collections have not yet recovered the cyclone.

159. The amroy sales gave a revenue of Rs. 38,690 chiefly in Cuddapah and Bellary. The Collector of Cuddapah (where Rs. 23,703 were collected) says that "this revenue is capable of great expansion. Inquiries made during the recent jamabandi have led me to the belief that the leases do not represent one-third of the actual value of the produce of the trees and topes leased." The Conservator is of opinion that the best way to improve this revenue is to begin by a stock-taking, but it is a little difficult to do this while other works are so heavy.

160. The sale of trees on "darkhast" lands, &c., &c., gave a revenue of Rs. 32,799 There seems room for a better system of valuation, as remarked by Mr. Peet last year, and this revenue would improve. There is a good deal of haphazard about the heads of service to which these collections are credited, sometimes to (*a*), (*b*), (*c*) or (*e*), probably due to classification according as the forest is timber or fuel yielding, bamboo or fruit tree land. The sales of babúl pods "Jolli" in Anantapur gave Rs. 2,346. Enough attention does not seem, however, to have been given to this source of revenue in other districts.

161. The comparison of the revenue under minor heads of service between this year and the last shows as follows

	1887-88	1888-89.
	Rs.	Rs.
II (*a*). Timber	1,19,871	1,40,633
(*b*). Fuel	1,01,263	1,08,303
(*c*). Bamboos	44,370	51,059
(*d*). Grazing and grass	59,773	77,459
(*e*). Minor produce	1,18,627	1,17,735
Total ...	4,43,904	4,95,189

showing a slight decrease in 'minor produce' probably due to sales of darkhast trees credited to other heads, and an improvement in all other heads, and especially in grazing.

Free Grants.

162. Appendix D shows the amount of material reported to have been given free during the year. The Conservator does not think that any analysis is of value, the return speaks for itself and he can only endorse the remarks about it made by the Acting Conservator last year in his paragraph 36. He has struck out the free grazing right on unreserved lands entered by the Kistna Collector's office at 40,000 rupees, because a similar right is given by the Forest rules in all districts. With regard to the two other Kistna entries, the Conservator considers that it was not the intention of Government that rights of the kind should be given away by Collectors in such wholesale way, but only here and there where they considered circumstances urgently needed it. So far as small concessions regularly granted go, the returns from other districts seem reliable.

Drift and Confiscated wood.

163. The sales of drift, waif and confiscated wood are shown in Form 71 (*b*). In Godávari, 12,968 cubic feet of teak and 2,499 cubic feet of miscellaneous timber were collected and sold for Rs. 8,227. The total amount of the collections under head III was Rs. 12,531 as against Rs. 9,328 last year showing a considerable improvement and pointing to a better collection of Godávari drift and better system of check of forest offences.

CHAPTER VI.

FINANCIAL RESULTS.

164. Form 64 gives the summary of district revenue and expenditure as follows:—

		RS.	RS.
Revenue		...	6,16,920
Expenditure A		2,54,298	
Do. B		2,20,244	
			4,74,542
	Surplus ...		1,42,378

showing a very good advance on the actuals of previous years, both in gross and net revenue, and a near approximation to the revised estimates which were—

		RS.	RS.
Revenue		...	5,98,000
Expenditure A		2,41,450	
Do. B		2,32,350	
			4,73,800
			1,24,200

the less amount expended being due to many officers being on leave during the year. The differences between the actuals and estimates need not be here gone into in detail as that will be done later on in submitting the budget for 1890-91.

165. The comparison of the revenue, expenditure and surplus of the last seven years is as follows:—

Year.	Revenue.	Expenditure.	Surplus.
	RS	RS.	RS.
1883-84	4,13,333	3,02,452	1,10,881
1884-85	5,37,197	3,98,566	1,38,631
1885-86	5,46,282	4,01,817	1,44,465
1886-87	5,52,248	4,34,966	1,17,282
1887-88	5,64,723	4,53,794	1,10,929
1888-89	6,16,920	4,74,542	1,42,378

showing that the rise of *gross* revenue, which has been gradual, has increased its rate during the year and that the rise in *net* revenue is also improving.

166. Compared with last year the revenue under the different heads was—

		1887-88.	1888-89
		RS.	RS.
I (*a*)		37,133	21,302
(*b*)		57,517	61,986
(*c*)		2,365	1,615
(*d*)		5,804	6,965
(*e*)		4,920	8,428
II (*a*)		1,19,871	1,40,633
(*b*)		1,01,263	1,08,303
(*c*)		44,370	51,059
(*d*)		59,773	77,459
(*e*)		1,18,627	1,17,735
III		9,328	12,531
IV		14	20
V		3,738	8,884
	Total ...	5,64,723	6,16,920

showing an increase under most items except departmental timber sales and more particularly in grazing dues. The decrease in departmental timber sales is chiefly due to the Cuddapah red sanders collections of the year not having been sold as explained in paragraph 149.

167. The comparison of revenue and expenditure of the districts is as follows :—

Districts.	Revenue.	Expenditure.	Surplus or deficit.
	Rs.	Rs.	Rs.
Direction	55	60,601	— 60,546
Ganjam	23,831	45,627	— 21,796
Vizagapatam	6,890	8,117	— 1,227
Godâvari	76,590	42,880	+ 33,710
Kistna	98,264	42,195	+ 56,069
Nellore	74,466	74,106	+ 360
Cuddapah	1,06,886	59,777	+ 47,109
Kurnool	1,07,894	35,607	+ 72,287
Bellary	40,561	26,098	+ 14,463
Anantapur	30,382	17,835	+ 12,547
Nilgiris	51,101	61,699	— 10,598
Total ..	6,16,920	4,74,542	+ 1,42,378

It will be seen that omitting 'direction' there are deficits only in Ganjam, Vizagapatam and Nilgiris. So far as Nilgiris is concerned the deficit was expected to be larger, in Vizagapatam the amount is small and the expected deficit in Ganjam was explained in the revised estimate for 1888-89 given in the budget report of 1889-90. It is very satisfactory to note that the deficits expected in the revised estimates in Nellore, Bellary and Anantapur have been converted into a surplus in each district and that the surplus revenue of Kistna and Kurnool has been largely increased. On the other hand, the net revenue of Cuddapah has been much reduced from the revised estimates for reasons already explained. As a set-off, it must not be forgotten that we have sufficient sleepers on hand in Ganjam, to cover by their value more than the deficit and that the sale of the Cuddapah red sanders wood will go to improve the revenue of the current year. On the whole, it must be admitted that the results for the year 1888-89 have been good and that the forest revenue has a tendency to rise a little faster than in the last five years.

168. Form 65 shows the outstandings on account of contractors and disbursers during the year, the amount having been reduced from Rs. 39,681 to Rs. 11,624, almost all of which is merely in disburser's accounts. Form 66 shows the revenue outstandings amounting to Rs. 3,810 against Rs. 3,732 last year. The Conservator will be glad to see these outstandings reduced another year to nothing at all, for there is no necessity for having any revenue outstanding, except in very special cases. It is understood that the Ganjam amount was on account of timber sold, that in Kistna for balance of grazing sales, and that in Nilgiris for balance of price of timber purchased.

169. Form 67 gives the distribution of revenue and expenditure under the three heads of "Departmental timber works," "Other revenue," and "Improvement of forest." The ratios adopted were Vizagapatam 1, Bellary, Anantapur and Nilgiris 2 each, and the rest three, twenty-fifths. The deficit under "Timber operations" would have been a surplus had the Ganjam sleepers and the Cuddapah red sanders wood been sold. Considering the large amount of time devoted to forest settlement by the staff in Nellore and Cuddapah, it is probable that the proportion of establishment debited to these districts is rather too high.

170. Forms 73 (*a*) and 73 (*b*) show the comparison between the value of timber and plant respectively at the beginning and end of the year, so that the year's transactions give—

	Rs.
Net revenue	1,42,378
Outstanding revenue	3,810
Difference of value of timber 73(*a*)	35,352
Do. do of plant 73(*b*)	22,173
Total ...	2,03,713

which is the correct surplus to the credit of the department at the end of the year.

CHAPTER VII.

General Remarks.

171. There is not much to be said here, for the Conservator was away on furlough during the first nine months of the year. But he thinks it well to record his opinion that in spite of the great weakness of both superior staff and subordinate establishment, the condition of the work of the department is improving. When once the staff can be relieved of the heavy duties which devolve upon it in the work of settlement of reserved forests and be at liberty to devote attention entirely to protection, improvement and working, a great step will have been made. One has only to see how in districts in which, like Nílgiris, settlement work is nearly done, matters have improved, to long for the end of what may be called the "legal phase" of forest development and the commencement of what may be called the period of stock-taking, during which the working plans will have to be framed and protection more fully studied.

172. Mr. A. W. Lushington in Ganjam has worked with his usual energy and enthusiasm. In Godávari, Mr. Battie has worked very well, as has Mr. Homfray in Kistna. Mr. Brougham in Nellore has a difficult piece of work in the settlement which he is doing well and carefully. In spite of the little mistake about the red sanders wood referred to in paragraph 149, Mr. Lodge has done good work in Cuddapah, especially in demarcation. The district is a very heavy charge indeed for one officer and the forest blocks distributed over the whole area. In Kurnool Mr. P. M. Lushington, like his brother, has set to work with energy, and, in spite of inexperience, has done well.

173. Sub-Assistant Conservator Mr. T. M. Nallasawmy Naidu in Nílgiris has, as usual, done excellent work and deserves great credit for it. The work of Mr. Stafford, Sub-Assistant Conservator in Godávari, is reported to have been very unsatisfactory. Almost all the Forest Rangers have been reported to have done well, especially Mr. Ward, Mr. Newman, Mr. McLaughtin, R. Sundram Pillai, P. Ananda Row, and A. Eggia Sastri.

174. The Conservator desires again to recognize the good work done by his office staff.

175. The annual reports were not all very punctual, in spite of an early reminder about them from the Conservator. The Conservator regrets to say that some of them had many mistakes and omissions; some, like that from Kistna, were very meagre; but on the whole it is clear that most District Forest Officers took pains to make their reports better this year and give more precise information than previously. The returns are somewhat intricate, nevertheless, if good returns could be sent up from Cuddapah and Nellore, there is no reason why those from Godávari, Bellary and Nílgiris should have been so bad. The office staff in most districts is weak as the Collectors have frequently complained: until it can be improved and better men obtained, the Conservator and his office will have to go on spending nearly a month every year almost exclusively on the preparation of the annual report and its returns and write many letters calling for explanations and further information.

176. The health of the subordinate establishment has been better reported on this year, except from the South-East Wynaad and the Upper Godávari. The staff of officers suffered a good deal, necessitating most of them applying for leave after the close of the year. The Ganjam scarcity does not much affect the work of the forests.

177. *Service books* are, with very slight exceptions, all reported to have been properly kept up.

178. The Conservator desires to report that the arrangement of the Forest Museum in the Board's office is now nearly complete. The woods have all been carefully arranged and named and the collection of produce, seeds, &c., is fairly well illustrative of the resources of the Presidency. He is indebted to his head-clerk, V. Setu Row, for much care and pains taken with the museum. Mr. McArthy's services were also very useful in January 1889.

APPENDIX A.

Experiments and Exotics.

Arabian Date.

In *Ganjam* 10 lb. of seed was sown, of which about 50 per cent. germinated, the rest having been apparently eaten by rats. In *Godávari* 24 healthy seedlings were planted at Ramasaram and 36 at the rest-houses in Rékapalle.

In *Kistna* 970 three-years old plants were planted in the "Weld" plantation and 270 at Kanukolu. In *Nellore* there are now 719 promising plants, partly at Stríharikóta and partly at Dugarázpatam. In other Ranges, the experiment "proved an entire failure, due no doubt to the fact that the Range officers did not, owing to their extensive charges, devote that careful and constant supervision which the Stríharikota and Casuarina Plantation Foresters were able to do" (Collector's No. 1260 dated 10th July 1889).

In *Cuddapah* there were 536 offsets received in 1886; of these, 390 have lived and made fine strong plants, some 6 to 10 feet high, bearing numerous small offsets from which it is proposed to propagate, for in this way we are sure to have female plants. Of seedlings, 490 two-years old plants (1887) have been planted out in a piece of land adjoining the Ballipalle nursery and are doing well. Bazaar seeds sown in 1888 did not germinate; but imported seeds did and 399 plants are doing well as well as 70 plants at Kamalapuram.

In *Kurnool* we have about 50 plants (sown in September 1888) at Vepanegundla tope and a few in Cumbum and Yerramalais. Some seeds given to ryots have done well and good plants are being reared. In *Bellary* there are now about 550 good seedlings at the Rámandrug nursery. In *Nilgiris* we have about 500 strong and healthy seedlings at the Kullar nurseries. As remarked by the Government, the cultivation of the edible date, a most important introduction, "has now passed the experimental stage and may be conducted on an extensive scale." It will be seen that in all districts, except Vizagapatam and Anantapur, have successful experiments been made and the Conservator will arrange this year for the more extensive works which are required.

Eucalyptus.

In September 1888 seeds of the following five species of Eucalyptus were distributed by the Board of Revenue direct to Collectors or District Forest-officers for experiment, viz., *Eucalyptus robusta, citriodora, corymbosa, resinifera and tereticornis.* The following are the reports received from District Forest-officers regarding them:—

Ganjam.—"All germinated, but *robusta* and *citriodora* are the only two doing well, and of these we have plants (sown in November) of from 3 feet to 6 feet high. The other three kinds have all a tendency to creep along the ground and cropping seems no good."

Godávari.—"The five kinds put down in the Bendamurlanka casuarina plantations all germinated well but *resinifera* has died out altogether. Of *corymbosa* there are about 30 seedlings living but not very healthy of *citriodora* about 50 seedlings are alive and doing fairly well. Of *tereticornis* and *robusta* there are about 200 seedlings from 6 inches to 30 inches in height alive and doing very well."

Kistna.—"Seed of several species of Eucalyptus were sown, but although most germinated only the *E. citriodora* seedlings survived and these too died off when about 3 inches high."

Nellore.—"Some were tried in Stríharikóta in October 1888, but the experiment was an entire failure. I tried these sorts myself in the compound of my bungalow in the month of October The seeds were put down on the 11th October and it took from 10 to 14 days to germinate, but in the course of a couple of weeks, the seedlings faded away although I shaded them from the sun and otherwise carefully attended them. A second trial was made and this also proved a failure. The seeds were sown on the 5th December and commenced to germinate by the 18th idem. By the end of January following, the whole of the seedlings died off though the weather was quite favorable. The Stríharikóta Forester has a portion of seed left which will be sown later on and results reported."

Cuddapah.—"Seeds sown 18th November 1888; seedlings broke soil on the following dates:—*corymbosa, tereticornis*, 27th November 1888; *citriodora, resinifera*, 1st December 1888; *robusta*, 3rd January 1889: *robusta* and *resinifera* poor and unhealthy looking; others doing well. Some of the same packets of seeds were sent to Badvél where not one germinated and some to Horsleykonda where only three wretched seedlings have come up."

Kurnool.—"A small nursery of 24 beds was formed in the compound of the Nandyál bungalow for experiments with the Eucalyptus sent by the Board of Revenue. A small quantity of all these seeds germinated, but on the commencement of the hot weather most of them dried up. The *citriodora* is, however, an exception to this as they germinated freely and produced some rapidly-growing plants, some of which are now two feet high. Attempts have been made to remove these, but owing to the heat they have dried. These species might be made to succeed if sown in the early rains and planted out in the second rains, being rapid growers. In the present case they were not sown till November 1888, and had therefore very little chance. A similar amount of Eucalyptus seeds were handed over to the Department by the Collector and a small nursery was made in the Yerramalais. These were not sown until December. These germinated slowly and with difficulty and having reached a height of about 2 inches the leaves dried up. The result of these experiments may therefore be said to be a failure partly attributable to the fact that the seeds were not distributed until an unfavorable part of the season had been reached and partly due to the unfitness of the climate. The District Forest-officer believes that *citriodora* might be made to grow, perhaps *corymbosa* if considerable care and trouble were taken over the experiment."

Nilgiris.—"A small quantity of each of the marginally-noted kinds of Eucalyptus seeds was received from the Board of Revenue intended for experiment as to whether they can be successfully grown on the plains. Half of the quantity was sown in Kullar and the other half in Moyar nurseries, which are the driest parts of this district. The following is the result :—

Eucalyptus resinifera.
Do. tereticornis.
Do. corymbosa.
Do. robusta.
Do. citriodora.

Name of seed.	When sown.		Number germinated.		Number basketted.		Number surviving.		Remarks.
	Kullar.	Moyar.	Kullar.	Moyar.	Kullar.	Moyar.	Kullar.	Moyar.	
Eucalyptus resinifera ..	23rd October 1888.	23rd October 1888.	..	103	..	..	..	103	The average height of the surviving plants is 9 inches.
Do. tereticornis ..			..	..	..	..	..	..	
Do. corymbosa ..			75	180	75	..	24	180	
Do. robusta .			24	200	24	..	13	200	
Do. citriodora ..			18	213	18	..	7	203	

The plants in Kullar look very unhealthy."

The Conservator does not consider further comment than is made in his paragraph 109 necessary. He has no faith in the endeavour to acclimatize the various species of Eucalyptus in the Indian plains. Doubtless, and as these trials show, a few plants can be reared if treated very carefully, garden fashion, and at some expense, but that is not what the Forest Department aims at. What we require are trees that can be grown easily and cheaply and on poor soil (for we have very little good soil indeed and what there is is mostly already covered with fine indigenous timbers of far greater value than those of the Eucalypti) in dry and rocky places, and it is a pity to waste money and time on such experiments when they might be applied so much more advantageously to works which we know are likely to succeed and pay, directly or indirectly.

In the *Nilgiris*, however, the Conservator has been endeavouring to raise plants of the various species with authentic names and this year were planted the following in patches in Sim's Park Experimental Garden :—

	NO.
Eucalyptus Gunnii	545
Do. botryoides	320
Do. crebra	1,157
Do. robusta	1,238
Do. corymbosa	406
Do. tereticornis	688

all being most carefully marked off and labelled. In this way we shall be able to make sure of names and be able to collect seed : at present though there are almost hundreds of species of the genus in cultivation on the Nilgiris, the Conservator (and, indeed, the Superintendent of the Botanical Garden) has found it extremely difficult to name them satisfactorily.

Mahogany.

The success of the mahogany plantations at Kullar is referred to in paragraph 99. In a few years time those who may ride up the old ghât road from Kullar to Barliyár will pass through a forest of mahogany for nearly the whole distance. In other districts mahogany

has not been successful, except so far as it has been treated garden fashion and carefully watered and tended. The Conservator proposes to make no more experiments in districts other than Nílgiris but in that district to continue planting wherever the soil and climate prove suitable. It may be stated here that the borer has now disappeared, it is said, through the application of the kerosine oil and soap. (See last year's report).

Maltese edible Cactus.—There are twelve plants at Stríharikóta (Nellore) and eighteen at Kamalapuram (Cuddapah), all in good condition.

Haloxylon Ammodendron.—Seed of this plant was sent by the Agri-Horticultural Society to Cuddapah and Kurnool; but did not germinate.

Coniferæ.—The Nílgiri planting works show conclusively that the best species for cultivation on the hills are—

Pinus longifolia	Himalaya.
Do. maritima	S Europe.
Do. insignis	California.
Frenela rhomboidea	Australia.
Cryptomeria japonica	Japan.
Cupressus macrocarpa	California.
Do. torulosa	Himalaya.

The Conservator proposes also to try the Californian red wood (*Sequoia sempervirens*) and the European *Pinus Laricio* as likely to succeed. Seed of *Podocarpus elongatus*, which we received in 1885 from Mr. Hutchins at the Cape, has also done fairly well, so too has the Assam *Pinus kasya*. The Collector of Vizagapatam has tried to grow *Cryptomeria* on the Pálkonda hills, and there are about forty healthy plants. It is doubtful, however, if they can stand the hot weather.

Miscellaneous.—*Casuarina suberosa* has been very successfully grown on the Nílgiris and can be planted there as easily and cheaply as *Casuarina equisetifolia* in the vicinity of Madras or Bangalore. The Sikkim *Bucklandia populnea* is also a success in Nílgiris and more seed must be procured as it is a useful timber as well as being a very beautiful tree. The Darjeeling maples *Acer Campbellii*, *lævigatum* and *Hookeri* still grow, but cannot withstand the frost without protection. The same is the result with *Grevillea robusta*. *Acrocarpus fraxinifolius* has been found to grow wonderfully quickly at Anantapur and on Horsleykonda in Cuddapah, which is an interesting thing.

The report on experiments from Kistna ought to have given us better information about the "Weld" plantations; the reports from other districts are full and interesting. Nothing was done in Anantapur.

MADRAS,
29th June 1889.

(Signed) J. S. GAMBLE.

APPENDIX B.

STATEMENT showing the cost and yield up to March 31, 1889, of the Casuarina Plantations in Nellore and Gúdúr taluks.

Plantation.	Compartment number.	Area.	Year of planting.	Total expenditure up to 31st March 1889.	Cost per acre.	Yield up to 31st March 1888.	Approximate Return up to 31st March 1888.		Yield during 1888-89.				Approximate Return during 1888-89.		Grand Total.	
									Cutting storm wood.	Clean felling.						
							Rate.	Amount.	Tons.	Area.	Tons.	Total.	Rate.	Amount.	Total tons, 7 and 13.	Total amount, 9 and 15.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				Rs.	Rs.		Rs.	Rs.					Rs.	Rs.		Rs.
Dugarázpatam ..	1 & Extra interplanted ..	45	1873 1874	10,132	225	1,540	6	9,240	293	..	..	293	5	1,475	1,835	10,715
	2	26	1874	6,908	265	589	..	3,534	1	..	..	1	..	5	590	3,539
	3	30	1875	6,449	215	754	..	4,524	..	..	..	..	..	..	754	4,524
	4	50	1880	3,397	57	544	..	3,264	5	..	..	5	..	25	549	3,289
	5	104	1881	4,416	42	678	..	4,068	180	..	..	180	..	900	858	4,968
	Numbers not yet given.	4	1882	..	..	29	..	174	4	..	..	4	..	20	33	194
		73	1883	3,585	49	15	..	90	14	..	..	14	..	70	29	160
		60	1884	2,526	42	9	..	54	..	..	..	..	..	..	9	54
		30	1885	1,438	48	..	..	..	..	..	..	..	..	..	..	..
		60	1886	413	7	..	..	..	..	..	..	..	..	..	..	..
		100	1887	911	9	..	..	..	..	..	..	..	..	..	..	..
		80	1888	573	7	..	..	..	..	..	..	..	..	..	..	..
Village tope, casuarina	..	4	1883	126	31	..	..	..	..	..	..	..	..	..	..	..
Ebrow's	..	19	Resumed by Government under tope rules.			502	..	3,024	..	..	..	..	..	..	504	3,024
Salt tope	..	4	..	..	..	35	..	210	..	..	..	..	..	..	35	210
6. Islands in backwater.	1880 1883	7	..	..	..	..	..	..	6	..	..	6	..	30	6	30
Kottapatam ..	1 & Interplanted.	24	1873 1874	6,005	250	1,154	..	6,924	..	..	..	..	..	..	1,154	6,924
	2	24	1874	6,536	272	884	..	5,304	..	..	..	..	..	..	884	5,304
	3	32	1875	6,170	139	1,496	..	8,976	..	..	..	..	..	..	1,496	8,976
	4	40	1880	3,082	77	198	..	1,188	45	..	..	45	..	225	243	1,413
	5	112	1881	4,408	39	956	..	5,736	117	..	..	117	..	585	1,073	6,321
	Numbers not yet given.	16	1882	..	..	..	..	..	..	..	..	..	..	..	..	..
		22	1883	1,046	48	1	..	6	32	..	..	32	..	160	33	166
		37	1884	1,591	43	..	..	..	..	..	..	..	..	..	..	..
		30	1885	986	33	..	..	..	..	..	..	..	..	..	..	..
		25	1886	217	8	..	..	..	..	..	..	..	..	..	..	..
		50	1887	1,125	22	..	..	..	..	..	..	..	..	..	..	..
		50	1888	280	6	..	..	..	..	..	..	..	..	..	..	..
Chattram tope ..	Resumed by Government under tope rules.					120	..	720	..	..	..	..	..	..	120	720
Pamangi tope ..	Do.					169	..	1,014	..	..	..	..	..	..	169	1,014
Royalpalem tope ..	..	..	..	..	..	..	..	..	13	..	..	13	..	65	13	65
Tamminapatam ..	1 Interplanted.	41	1873 1874	12,143	196	769	..	4,614	..	..	..	..	..	..	769	4,614
	2	59	1874	9,576	162	1,008	..	6,048	..	..	..	..	..	..	1,008	6,048
	3	29	1875	7,878	272	587	..	3,522	..	..	..	..	..	..	587	3,522
	4	64	1880	3,808	59	140	..	840	..	..	..	..	..	..	140	840
	5	139	1881	5,779	42	126	..	756	..	..	..	..	..	..	126	756
	Numbers not yet given.	81	1882	84	1	182	..	1,092	..	..	..	..	..	..	182	1,092
		68	1883	2,392	33	1	..	6	..	..	..	..	..	..	1	6
		30	1884	1,267	42	..	..	..	..	..	..	..	..	..	..	..
		10	1885	350	35	..	..	..	..	..	..	..	..	..	..	..
Around wells No. 1..		4	1886	212	53	..	..	..	..	..	..	..	..	..	..	..
Resumed by Government.		4	Under tope rules.			118	..	708	..	..	..	..	..	..	118	708
Around wells of Nos. 1, 2 and 3.		20	1887	746	37	..	..	..	..	..	..	..	..	..	..	..
		20	1888	165	8	..	..	..	..	..	..	..	..	..	..	..
Utukur	1	32	1875	7,727	232	94	5	470	..	..	..	..	..	..	94	470
	2	32	1880	3,927	122	22	..	120	..	..	..	..	..	..	22	120
	3	84	1881	4,728	56	8	..	40	..	..	..	..	..	..	8	40
Varani	1 Interplanted.	40	1873 1874	10,339	258	58	..	290	..	..	..	..	..	..	58	290
	2	40	1874	8,911	223	115	..	575	..	..	..	..	..	..	115	575
	3	40	1875	8,108	202	50	..	250	..	..	..	..	..	..	50	250
	4	40	1880	3,189	80	35	..	175	..	..	..	..	..	..	35	175
	5	80	1881	4,113	51	12	..	60	..	..	..	..	..	..	12	60
	1883	3	1881	121	40	..	..	..	..	..	..	..	..	..	..	..
Allipuram	1	18	1870	8,580	476	146	..	730	..	..	..	..	..	..	146	730
	2	36	1881	707	20	..	..	..	..	..	..	..	..	..	..	..
Iskapallo	..	6	1870	960	160	104	..	520	..	..	..	..	..	..	104	520
Total ..	..	2,187	..	1,77,930	77	13,250	..	78,866	710	..	..	710	..	3,560	13,962	82,426
Excess in reweighing.	..	..	..	..	..	..	..	..	11	..	..	11	..	..	..	..
	..	..	..	..	..	..	..	..	721	..	..	721	..	..	..	..

APPENDIX C.

STATEMENT showing the yield of several compartments felled and thinned during the year 1888-89 according to the plan of operations, Nilgiri district.

Range.	Working circle.	Block.	Compartment.	Area thinned or felled.	Age when thinned or felled.	Number of trees felled.	Firewood.		Drag poles.	Total yield in cubic feet.	Number of belt trees.	Number of standards left.	Total trees.	Estimated quantity of standing trees in cubic feet.	Total yield in cubic feet.	Yield per acre in cubic feet.
							Firewood.	Branch wood.								
				ACS.			C. FT.	C. FT.	POLES.	C. FT.						
Coonoor.	Bleak house.	..	4	5½	13	19	100	953	580	580	1,633	59	146	205	1,350	2,983	542
		..	6	9	12	13	350	5,965	100	100	6,415	..	240	240	2,650½	9,065½	1,007
		..	7	9½	13	80	4,300	216	..	..	4,516	..	85	85	2,500	7,016	739
	Bandy Shola.	N. ..	8		23	214	9,600	1,833	..	..	11,433	15	96	111	2,150	13,583	3,395
		S. ..	21	3	23	196	8,900	1,714	..	..	10,614	30	71	101	1,500	12,114	3,727
	Coonoor Peak.	I.	3	7	17	1,314	54,250	4,883	..	..	62,133	275	215	490	8,550½	70,683½	10,097
			9	..	..	26	..	..	140	140	140	..	..	..	..	140	..
		II.	13	2	16	504	17,750	1,805	1,144	1,144	20,699	90	110	200	2,200½	22,899½	11,449
		III.	23	4	16	777	25,975	2,493	900	900	29,368	..	217	217	7,225½	36,593½	9,147
		IV.	37	5	16	1,515	48,950	2,912	..	..	51,862	..	217	217	7,225½	59,087½	11,818
Ootacamund.	Rallia ..	..	..	6	16	1,322	33,350	2,062	..	..	35,412	..	271	271	2,900½	38,312½	6,966
	Cairn Hill.	..	2	..	..	22	1,450	..	..	..	1,450	..	..	..	..	1,450	..
		..	3	4	15	2,027	45,400	2,621	..	..	48,021	174	..	174	2,900	50,921	12,730
	Aramby	I.	2	..	..	71	800	..	..	..	800	..	..	..	..	800	..
			2	4	15	1,053	19,550	1,196	..	..	20,746	..	..	..	..	20,746	5,532
		IV.	15	3½	15	1,083	15,500	742	..	..	16,242	..	..	..	..	16,242	4,640
			14	2½	15	1,604	27,800	1,322	..	..	29,122	82	..	82	164	29,286	11,714
	Governor's Shola ..	Baikie.	2	..	..	191	4,000	..	..	..	4,000	..	..	..	..	4,000	..

APPENDIX D.

STATEMENT showing free grants during the year 1888-89.

District.	Authority under which granted.	Range.	Locality.	Name of grantee.	Purpose for which granted.	PRODUCE GRANTED.		
						Description.	Number or quantity.	Value.
								Rs. A. P.
Ganjam..	..	Suradá ..	Buguda ..	Inhabitants of Buguda village.	For rebuilding houses destroyed by fire.	Timber ..	C. ft. 1,640	15 6 0
						Bamboos ..	No. 9,840	10 4 0
						Nara ..	C. ft 820	4 6 0
			Hukuma ..			Timber ..	3,600	33 12 0
						Bamboos ..	No. 21,600	22 8 0
						Nara ..	C. ft. 1,800	13 12 0
			Bondokodanda.			Timber	1,600	7 8 0
						Total ..	C. ft. 9,460 No. 31,440	107 8 0
Vizagapatam, Northern Division.	Deputy Tahsildar.	Pálkonda..	..	..	..	Timber	C. ft. 12,485	705 2 6
						Fuel	12,210	228 15 0
						Bamboos	No. 81,330	667 12 0
	Forest Ranger.	Do. ..	..	..	..	Timber	C. ft. 380	11 14 0
						Fuel	1,960	36 12 0
						Bamboos	No. 2,220	18 8 0
Vizagapatam Southern Division.	Principal Assistant Collector.	Sarvasiddhi.	Sokallipalem.	50 persons ..	Preparing jaggery.	Brushwood ..	C. ft. 645	32 4 0
						Total ..	C. ft. 27,680 No. 83,550	1,701 3 6
Godávari.	..	Delta ..	Coringa ..	Village Munsif of Coringa.	For consumption.	Fuel	C. ft. 3	0 2 0
			Vakatippa, &c., seven villages in number.	Village officers.	For constructing bridges over drains and for "sangadies" to cross Mandapetta canal.	Palmyra trees ..	390	39 0 0
						Tumma	135	9 0 0
						Date	30	0 6 0
						Total ..	558	48 8 0
Kistna..	Collector, Rules under section 26 of the Forest Act.	Bandar Bápatla	Coast forests.	Inhabitants.	For cattle fodder.	Right to take the leaves of the "Mada" (Avicennia tomentosa) free of payment.	..	2,000 0 0
		Bezwáda.	Kondapalli ..		As a relief to the neighbouring villagers.	Right to cut and remove grass free of charge so long as the forests are protected from fire.	..	3,000 0 0
			Bezwáda ..		Do.			
			Vellatur hills.		Do.			
		Guntúr.	Kondavid ..					
		Krósúr.	Bellamkonda.					
						Total ..	..	5,000 0 0

Statement showing free grants during the year 1888-89—*cont.*

District.	Authority under which granted.	Range.	Locality.	Name of grantee.	Purpose for which granted.	Produce granted.		
						Description.	Number or quantity.	Value.
							C. ft.	Rs. A. P.
Nellore ..	Collector's order.	Kávali ..	Chennayapollem.	A. Ancadu and others.	For rebuilding houses destroyed by fire.	Palmyra trees ..	390	39 0 0
			Chinna Annalur and Turupupollem.	Nallapanainy Kondapa Naidu.		Do. do. ..	300	30 0 0
						Margosa do. ..	80	8 0 0
			Chinna Annalur and Kaligiri.	C. Soobba Naidu and K. Rungappa Naidu.		Palmyra do. ..	220	22 0 0
						Margosa do. ..	60	6 0 0
			Chinna Annalur and Gudanalloor.	Nallapanainy Akkappa Naidu.		Palmyra do. ..	40	4 0 0
						Margosa do. ..	20	2 0 0
			Chinna Annalur and Kaligiri.	K. Kondappa Naidu.		Palmyra do. ..	120	12 0 0
						Margosa do. ..	40	4 0 0
			Chinna Annalur and Gadanalloor.	K. Vengama Naidu.		Palmyra trees ..	80	8 0 0
						Margosa do. ..	20	2 0 0
				K. Kondappa Naidu.		Palmyra do. ..	100	10 0 0
						Margosa do. ..	40	4 0 0
				P. Audemma.		Palmyra do. ..	60	6 0 0
						Margosa do. ..	20	2 0 0
				S. Ramaswamy.		Palmyra do. ..	120	12 0 0
						Margosa do. ..	40	4 0 0
			Chinna Annalur.	Ryots of Chinna Annalur.		Palmyra do. ..	940	94 0 0
						Margosa do. ..	200	20 0 0
					For agricultural implements.	Tumma do. ..	150	2 8 0
		Nelloro ..	Golagamoody.	G. Tiruvengalam.	For rebuilding houses destroyed by fire.	Palmyra do. ..	860	86 0 0
						Total ..	3,900	377 8 0
Cuddapah.	District Forest-officer's order.	Cuddapah..	Gutur ..	Inhabitants.	For rebuilding houses destroyed by fire.		120	7 8 0
		Do. ..	Bavanarsipalle				180	11 4 0
		Proddutur .	Somayajulapalle.				80	5 0 0
		Sidhout ..	Kothur ..			Third-class timber.	180	11 4 0
		Rájampet..	Volagalacherla.				700	43 12 0
		Kadiri ..	Dhanayanicheruvu.				240	15 0 0
		Madanapalle.	Basinikonda..				240	15 0 0
			Vempalle ..				100	6 4 0
			Do. ..			Bamboos ..	No. 300	3 2 0
						Total ..	C. ft. 1,840 No. 300	118 2 0
							C. ft.	
Kurnool..	Collector.	Márkápur	Gurujopalle..	Sheik Chinna Mavula and 5 others.	For rebuilding houses destroyed by fire.		240	15 0 0
			Gujjuvaripalle.	T. Venkiah and 7 others.		Third-class wood, rough.	300	18 12 0
			Vomulakota..	D. Kotadu and 11 others.			240	15 0 0
		Nandyál ..	Gorakallu ..	K. Papugadu and others.			160	10 0 0
		Nandikótkur.	Ramapuram..	G. Karnigadu and 69 others.			2,460	150 12 0
						Bamboos	No. 14,760	150 12 0
						Total ..	C. ft. 3,400 No. 14,760	360 4 0

Statement showing free grants during the year 1888-89—*cont.*

District.	Authority under which granted.	Range.	Locality.	Name of grantee.	Purpose for which granted.	Produce granted.		
						Description.	Number or quantity.	Value.
							C. ft.	Rs. A. P.
Bellary ..	Rule 13 of the rules framed under section 26 of the Madras Forest Act.	Bellary ..	Bondanakallu (Rayadrug taluk).	24 ryots, each 20 cubic feet.	For rebuilding houses destroyed by fire.	Third-class timber.	480	30 0 0
						Total ..	480	30 0 0
Anantapur	Collector's order.	Penukonda.	Somandepalle jungles.	Three ryots of Somandepalle.	For rebuilding houses destroyed by fire.	Rafters	350	3 8 0
						Poles	12	
		Dharmavaram.	Kunathur ..	Ten ryots of Kunathur.		Rafters	400	25 0 0
			Madapur ..	Nine Madigas of Madapur.		Do.	600	10 0 0
						Poles	60	
		Hindupur..	Hulikera ..	Villagers of Hulikera.	For building houses on a new site as the old site was not prosperous.		C. ft.	
						Margosa trees ..	60	30 0 0
						Tella tumma trees	65	
						Nulla do. ..	360	
						Chigara trees ..	40	
						Total ..	1,947	68 8 0
Nilgiris..	..	Ootacamund.	Village forests attached to each range.	Todas, Kottas and Badagas.	For building new houses.	Junglewood trees.	560	84 0 0
					For building craals.	Do. do.	140	21 0 0
					For building funeral sheds.	Do. do.	140	21 0 0
					For ploughing materials.	Do. sticks.	144	18 0 0
		Coonoor.			For building houses.	Do. trees.	60	9 0 0
					For building craals.	Do. do.	20	3 0 0
		Melur ..			For building houses.	Do. do.	20	3 0 0
					For building craals.	Do. do.	40	6 0 0
		Naduvatam.			For building houses.	Do. do.	40	6 0 0
		Kotagiri.			Do. ..	Do. do.	20	3 0 0
						Total ..	1,184	174 0 0
						Grand Total ..	C. ft. 50,449 No. 130,050	7,985 9 6

Annual Form No. 59-A.

Forest Department, Madras, Northern Circle.

(i) Area of Reserved Forests, 1888-89.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	*Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Chokapad...	Dimrijholi	5,486	8½	...	...	5,486	8½	.....	
	Pondakhol.	Bondagocha ...	...	...	4,400	...	4,400	7	No. 253 of 13th Sept. 1888.	
	Bodoboro-singhi.	Malati	...	...	1,720	...	1,720	2½	No. 254 do.	
		Total ...	5,486	8½	6,120	...	11,606	18		
Vizagapatam.	Sarvasiddhi.	Peddapalle	...	...	8,960	...	8,960	14	No. 226 of 2nd Aug. 1888.	
Godávari.	Coringa ...	Coringa	...	...	7,000	...	7,000	11	No. 122 of 27th April 1888.	
	Narsápúr ...	Narsápúr	114	...	...	...	114	...	.....	
		Total ...	114	...	7,000	...	7,114	11		
Kistna.	Bandar	Kara	...	...	21	...	21	...	No. 227 of 3rd Aug. 1888.	
		Vanudhuru	...	...	64	...	64	...	No. 311 of 6th Nov. 1888.	
		Bomminampadu ...	...	...	26	...	26	...	No. 312 do.	
		Vémavarampadu ...	...	...	16	...	16	...	No. 313 do.	
		Allinagaram ...	...	...	125	...	125	...	No. 314 do.	
	Bezváda ...	Gavuravaram ...	...	...	81	...	81	...	No. 156 of 8th June 1888.	
	Krósúr ...	Konanki	...	...	3,600	...	3,600	6	No. 221 of 26th July 1888.	
	Palnád ...	Tummurukodu ...	...	...	24	...	24	...	No. 158 of 8th June 1888.	
	Rapatla	Lankavanidibba ...	4,480	7	...	...	4,480	7	.....	
		Kothapalem ...	3,840	6	...	...	3,840	6	.....	
		Total ...	8,320	13	3,957	...	12,277	19		
Nellore.	Ongole	Kottapatam ...	147	...	...	...	147	...	.....	
		Tummalapenta ...	100	...	...	...	100	..	.....	
		Kanuparti	520	1	...	...	520	1	.....	
		Ramapatam ...	60	...	...	...	60	...	.....	
	Kávali ...	Maddurpaud ...	...	...	2,012	...	2,012	3	No. 13 of 20th Dec. 1888.	
	Néllore ...	Iskapalle	...	...	23	...	23	...	No. 155 of 8th June 1888.	
	Gúdúr ...	Dugarazpatnam ...	23,800	37	...	*23,004	796	2	.....	* Rectification of area.
		Total ...	24,627	38	2,035	23,004	3,658	6		
Cuddapah.	Kodúr	Kodúr Plantation ...	50	...	...	...	50	...	.....	
		Thanakonda ...	1,048	2	...	...	1,048	2	.....	
		Uparapalle	108	...	...	...	108	...	.....	
		Kodúr Hill	7,440	11½	...	...	7,440	11½	.....	
		Seshachellam ...	128,000	200	...	...	128,000	200	.....	
		Settikunta	8,960	14	...	...	8,960	14	.....	
	Rajampet	Salivendra	12,800	20	...	...	12,800	20	.....	
		Pullampet	426	½	...	...	426	½	.....	Includes Mittamidapalli.
		Reddipalle	1,284	2	...	...	1,284	2	.....	
		Vattalúr	2,880	4½	...	...	2,880	4½	.....	
	Sidhout	Kanamalapalle ...	4,435	7	...	...	4,435	7	.....	
		Malliamkonda ...	10,240	16	...	...	10,240	16	.....	
	Badvél	Kavalakuntla ...	9,920	15½	...	...	9,920	15½	.....	
		Gangapenta ...	14,080	22	...	...	14,080	22	.....	
	Cuddapah	Kamalapuram ...	485	1	...	...	485	1	.....	

Area of Reserved Forests, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area of 1st April 1888.		Added during the year.	Excluded or transferred to other heads	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah—*cont.*	Ráyachóti	Sibbyála	3,500	5½	...	...	3,500	5½	.....	
		Tsundupalle	3,000	4½	...	...	3,000	4½	.....	
		Gadikota	12,462	19½	...	...	12,462	19½	.....	
	Váyalpád	Yelljutla	2,840	4½	...	...	2,840	4½	.....	
		Total	223,958	350	...	...	223,958	350		
Anantapur.	Ooty	Khojjapalle	367	½	...	...	367	½	.....	
	Anantapur.	Anantapur	131	...	...	...	131	...	.....	
	Penukonda.	Narsampalle	1,280	2	...	...	1,280	2	.....	
		Kottakotá	5,120	8	...	...	5,120	8	.....	
	Hindupur	Somarajmalai	1,920	3	...	...	1,920	3	.....	
		Total	8,818	13½	...	...	8,818	13½		
Nílgiris.	Ootacamund.	Marliamund Plantation	17	...	...	...	17	...	.....	
		Aramby	430	½	...	...	430	½	.....	
		Marliamund	194	...	...	...	194	...	.....	
		Cairn Hill	559	1	...	...	559	1	.....	
		Brooklands	177	½	...	...	177	½	.....	
		Lovedale	296	½	...	...	296	½	.....	
		Craigmore	299	½	...	...	299	½	.....	
		Doddabetta	991	1½	...	...	991	1½	.....	
		Snowdon	1,053	2	...	...	1,053	2	.....	
		Jakuntha	370	½	*3	...	373	½	.....	Rectification of area.
		Muthanád	420	1	...	...	420	1	.....	
		Governor's Shola	2,694	4½	...	23	2,671	4½	.....	
		Pykara	1,309	2	...	...	1,309	2	.....	
		Sandynullah	818	1	...	...	818	1	.....	
		Kongodu	415	½	36	...	451	½	.....	Do.
		Karpakan	391	½	...	...	391	½	.....	
	Naduvatam	Naduvatam Sholas	1,501	2	...	...	1,501	2	.....	
		Vellingiri	643	1	...	...	643	1	.....	
		Kadcoopa	1,622	2½	...	...	1,622	2½	.....	
		Makurti	8,953	14	...	...	8,953	14	.....	
		Northernhay	3,998	6	...	...	3,998	6	.....	
		Naduvatam	4,834	8	...	1,423	3,411	5½	.....	Omission of Government Cinchonas of Plantation.
		Gadsbrook	230	1	...	...	230	1	.....	
		Cherambadi	1,983	3	...	...	1,983	3	.....	
		Ammankaval	563	1	...	...	563	1	.....	
	Mélúr	Kundahs	40,521	63	...	...	40,521	63	.....	
		Mikkeru	1,267	2	...	...	1,267	2	.....	
		Thia Shola	1,551	2½	...	...	1,551	2½	.....	
		Hiriyashige	2,175	3½	...	...	2,175	3½	.....	
		Ithalar	460	1	...	...	460	1	.....	
		Devashola	215	½	...	...	215	½	.....	
		Balakola	935	1½	...	...	935	1½	.....	
		Athigarahatti	34	...	...	...	34	...	.....	
		Sutton Shola	52	...	...	...	52	...	.....	
		Commandu	993	1½	...	...	993	1½	.....	
		Pembroke	122	...	...	...	122	...	.....	
	Coonoor	Hulikal	6,411	10	...	...	6,411	10	.....	
		Honnathalai	320	½	...	...	320	½	.....	
		Rallia	189	½	...	...	189	½	.....	
		Black Bridge	390	½	...	...	390	½	.....	
		Coonoor Peak	540	½	...	...	540	½	.....	
		Lamb's-Rock	708	1	...	...	708	1	.....	
		Tiger Hill	328	½	...	...	328	½	.....	
		Ghát Reserve	311	½	...	...	311	½	.....	
		Hill Grove	187	½	...	...	187	½	.....	
		Kullar	1,815	3	...	...	1,815	3	.....	
	Kótagiri	Kótagiri	563	1	...	...	563	1	.....	
	Sígúr	Kalhatti slopes	8,983	14	...	...	8,983	14	.....	
		Ebanad	571	1	...	...	571	1	.....	
	Mudumalai.	Benné	11,041	17	27	...	11,068	17	.....	Rectification of area.
		Moyar	13,580	21	...	...	13,580	21	.....	
		Total	129,022	202	66	1,446	127,642	199½		
		Grand Total	400,345	625	28,138	24,450	404,033	631		

(ii) Reserved Forests under other orders.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Vizagapatam.	Palkonda.	Rupayi	....	....	300	...	300	½	Collector's order, dated 1st Aug. 1888.	
		Donabayi	...	...	20	...	20	...		
		Mekava	...	...	1,500	...	1,500	2½		
		Yegaluda	...	...	250	...	250	½		
		Kusumuru	...	...	3,500	...	3,500	5½		
		Gumpayi	...	...	1,500	...	1,500	2½		
		Barna	...	...	4,500	...	4,500	7		
		Antikonda	...	....	3,000	...	3,000	4½		
		Samaralli	...	...	20	...	20	...		
		Sumbakonda ...	...	...	10	...	10	...		
		Total ...	...	...	14,600	...	14,600	23		

ANNUAL FORM No. 59-C.

Forest Department, Madrás, Northern Circle.

Area of Reserved Lands, 1888-89.

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Ganjam.	Bodoborosinghi.	Kaliamba ... S	5,200	8	...	...	5,200	8		
		Teleki ... S	15,200	24	...	...	15,200	24		
		Baibali ...	21,920	34	...	...	21,920	34		
		Vinjagheri S	6,000	9	...	...	6,000	9		
		Malati ...	1,720	3	...	1,720	...	...		Transferred to Form No. 59A.
	Chokapad	Rogoda ... S	16,000	25	...	...	16,000	25		
		Darpangia ...	16,160	25	...	...	16,160	25		
		Rambha ...	9,300	15	...	...	9,300	15		
		Gullery ...	23,860	37	...	...	23,860	37		
		Koolada ... S	2,760	4	...	...	2,760	4		
	Gayagonda	Ambazara ...	32,000	50	...	...	32,000	50		
		Chodiapalli ...	960	2	...	...	960	2		
		Chendorgiri S	18,320	29	...	...	18,320	29		
		Gunduribadi ...	12,200	19	...	...	12,200	19		
		Gogodo	15,240	24	...	...	15,240	24	Notfn. No. 190 of 13th Oct. 1884.	
	Jagannathprasad.	Michalia	13,760	22	...	...	13,760	22		
		Brahmanosai ...	8,080	13	...	...	8,080	13		
		Jagannathprasad S	26,200	41	...	...	26,200	41		
	Buguda	Panchbuthi ...	10,000	16	...	5,680	4,320	6		Correction of area.
		Kurcholi ...	10,400	16	...	4,880	5,520	8		
		Kriyamba	28,280	44	...	4,960	23,320	36		
		Sandusalya S	2,000	3	...	...	2,000	3		
		Bodochendana S	800	1	...	...	800	1		
		Vishnuchakram ...	4,860	8	...	...	4,860	8		
		Bondagocha ...	4,400	7	...	4,400	...	...		Transferred to Form No. 59A.
	Pondokol	Dhougam	2,400	4	...	...	2,400	4		
		Pipalapanka ...	7,700	12	...	...	7,700	12		
		Moondapitta ...	6,880	11	...	...	6,880	11		
		Hukuma	4,160	7	...	...	4,160	7		
		Rayigoda	6,700	11	...	...	6,700	11		
		Dabuki	...	...	1,450	...	1,450	2	Notfn. No. 54 of 26th Feb. 1889.	
	Berhampore	Ramagodo ...	1,425	2	5,195	...	6,620	10	Notfn. No. 311 of 2nd Nov. 1885.	Correction of area.
		Bainamari ...	1,375	2	2,375	...	3,750	5¾		
		South Mohiri ...	2,600	4	1,130	...	3,730	5¾		
		Bollibagada ...	261	1	...	...	261	1		
		Balakristnapuram.	164	...	...	...	164	...		
		Chatrapur ...	695	1	...	...	695	1		
		Dura	279	1	...	...	279	1		
		Golabondo ...	379		...	...	379			
		Podhora	760	1	...	...	760	1		
		Mushidipolem ...	238	...	...	...	238	...		
		Kusimi	625	1	...	...	625	1		
		Bendaliya	163	...	...	...	163	...		
		Mohoda	419	1	...	...	419	1	Fuel and Fodder Reserves, Bd.'s Pro. F. 285 of 20th May 1887	
		Mushiyakalli ...	522	1	...	...	522	1		
		Ankusopuram ...	138	...	...	...	138	...		
		Mohughora ...	1,697	2	...	...	1,697	2		
		Maharlapalli ...	924	2	...	...	924	2		
		Virakrishnachandrapuram ...	445	1	...	...	445	1		
		Godohill	225	...	...	...	225	...		
		Joronohill ...	1,002	2	...	...	1,002	2		
		West Batukamarada ...	179	...	...	...	179	...		
		Nimmapuram ...	697	1	...	...	697	1		
		Sikharapuram ...	260	1	...	...	260	1		
		Shapuram	142	...	...	...	142	...		
		Total ...	349,074	548	10,150	21,640	337,584	527		
Vizagapatam.	Sarvasiddhi ...	Peddapalli ...	5,000	8	...	5,000	...	...	Notfn. No. 226 of 2nd Aug. 1888.	Transferred to Form No. 59A.
		Total ...	5,000	8	...	5,000	...	...		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Godávari.	Peddapur ...	Ragoovapatnam ...	12,160	19	...	...	12,160	19	Notfn. No. 448 of 23rd Nov. 1886.	
		Sullanka	17,920	28	...	...	17,920	28		
		Anantaveram ...	8,320	13	...	...	8,320	13		
		Totapalle	3,520	5	...	...	3,520	5		
		Oligogola	20,800	32	...	...	20,800	32		
		Ramasaram ...	2,500	4	...	...	2,500	4	Notfn. No. 213 of 23rd May 1887.	
		Murari	...	...	2,000	...	2,000	3	Notfn. No. 134 of 9th May 1888.	
		Kovida	...	...	2,100	...	2,100	3½		
	Rajahmundry.	Devancheruvu S	5,000	8	...	...	5,000	8	Notfn. No. 308 of 26th July 1886.	
	Bhadráchalam	Mulkanapalli S	5,300	8	...	...	5,300	8		
		Dumagudiem S	9,200	15	...	...	9,200	15		
		Arlaguram S	7,000	11	...	...	7,000	11		
		Tunkicheruvu S	13,800	22	...	...	13,800	22		
		Bhadráchalam S	12,700	20	...	...	12,700	20		
		Gogubaka ... S	2,000	3	...	...	2,000	3		
		Komanpalli S	4,400	7	...	...	4,400	7		
		Bandreo ... S	10,900	17	...	...	10,900	17		
		Golagupa ... S	8,500	13	...	...	8,500	13		
		Narakonda S	7,500	12	...	...	7,500	12		
		Pengha ... S	4,600	7	...	...	4,600	7		
		Upanapalli S	3,300	5	...	...	3,300	5		
		Tatlunka ... S	12,600	20	...	...	12,600	20	Notfn. No. 18 of 19th Dec. 1885.	
		Ramchandram S	10,300	16	...	...	10,300	16		
		Rapak ... S	8,000	12	...	...	8,000	12		
		Sitarampuram S	3,000	5	...	...	3,000	5		
		Bhandarguriam S	7,100	11	...	...	7,100	11		
		Burkankota S	1,500	2	...	...	1,500	2		
	Ellore ...	Kaler	6,500	10	...	...	6,500	10		
		Nialakota	2,700	4	...	...	2,700	4		
		Lakewaram ...	7,200	11	...	...	7,200	11		
		Kanslur	7,000	11	...	...	7,000	11		
		Mitapalli	13,000	20	...	...	13,000	20		
		Pulsmamri ...	6,800	11	...	...	6,800	11		
		Walsugri	8,700	14	...	...	8,700	14		
		Rekapalle hills ...	107,700	168	...	...	107,700	168		
		Marigura	45,500	71	...	...	45,500	71		
		Velagalapalle ...	2,560	4	...	...	2,560	4	Notfn. No. 210 of 23rd May 1887.	
		Chintalapudi ...	2,560	4	...	...	2,560	4		
		Barrikonda ...	3,840	6	...	...	3,840	6		
		Erraguntapalle ...	9,600	15	...	...	9,600	15		
		Bandamcherla S	6,400	10	...	...	6,400	10		
		Tadikalapudi ...	2,560	4	...	...	2,560	4		
		Ramsingavaram S	1,920	3	...	...	1,920	3		
		Coringa	6,720	10½	...	6,720	...	...	.....	Transferred to Form No. 59A.
	Delta ...	Upputer	10,000	15½	...	...	10,000	15½	Notfn. No. 291 of 29th July 1887.	
		Bendamurlanka S	371	1	...	...	371	1	Notfn. No. 416 of 10th Nov. 1886.	
		Total ...	453,551	708	4,100	6,720	450,931	704		
Kistna.	Bezváda ...	Kondapalle S*	35,222	54½	...	...	35,222	54½	Notfn. No. 143 of 30th July 1884.	* Part only settled.
		Kottur	7,593	12	...	...	7,593	12		
		Bezváda	960	1½	...	660	300	½		Alteration at settlement.
		Gunudhala S	580	1	...	180	400	½		
		Budavada ... S	5,120	8	...	470	4,650	7½		
		Jaggayapeta S	9,658	15	...	5,008	4,650	7½		
		Gavuravaram ...	80	...	...	80	...	...	.....	Transferred to Form No. 59A.
		Ibrampatnam ...	24	...	...	24	...	...	.....	Struck off Notfn. No. 16 of 21st Dec. 1888.
		Kondur	3,000	5	...	...	3,000	5	Notfn. No. 351 of 11th Oct. 1887.	
	Guntúr ...	Kondavid ... S	15,114	24	...	1,958	13,156	20½	Notfn. No. 143 of 30th July 1884.	
		Tadepalle ... S	2,800	4	...	500	2,300	3½		
		Kuragalln ... S	1,069	2	221	...	1,290	2		
		Nidamarru S*	581	1	...	...	581	1		
		Narakodur ...	811	1	...	...	811	1		* Part only settled.
		Karlapudi ... S	559	1	...	...	559	1		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kistna—*cont.*	Krósúr ...	Venkatayyapalem.	46,201	72	...	...	46,201	72	Notfn. No. 143 of 30th July 1884.	
		Bellamkonda ...	1,675	2½	...	...	1,675	2½		
		Nevalipur... ...	11,870	19	...	...	11,870	19		
		Konanki	3,600	5½	...	3,600	...	...		Transferred to Form No. 59A.
	Vinukonda ...	Bollapalli	37,712	59	...	...	37,712	59	Notfn. No. 143 of 30th July 1884.	
		Guttikonda ...	42,241	66	...	...	42,241	66		
		Kakirala	28,864	45	...	...	28,864	45		
	Palnád ...	Madinapadu S	9,600	15	...	...	9,600	15		
		Pasvemula ...	22,782	36	...	...	22,782	36		
		Kollagunta ...	34,947	55	...	...	34,947	55		
		Gungulagunta S	24,514	38	...	...	24,514	38		
		Mutukur	31,408	49	10 *	...	31,418	49	* Notfn. No. 250 of 5th Sept. 1888.	
		Thumerakodu ...	23	...	...	23	...	...		Transferred to Form No. 59A.
	Bapatla ...	Muthayyapalem ...	9,842	15	...	...	9,842	15	Notfn. No. 143 of 30th July 1884.	
		Pandhillapalli S	164	...	...	2	162	...	Notfn. No. 38 of 26th Jan. 1885.	
		Wardarovu S	70	...	12	...	82	...		
		Anumillipota ...	26	...	...	26	...	...	...	Erroneously given last year.
		Nayanapalli S	156	...	...	...	156	...	Notfn. No. 38 of 26th Jan. 1885.	
		Chirala	15	...	...	15	...	...	...	Erroneously given last year.
		Bapatla No. I ...	274	1	...	27	247	1	Notfn. No. 38 of 26th Jan. 1885.	
		Do. „ II S	840	1	...	...	840	1	Notfn. No. 350 of 11th Oct. 1887.	
		Karlapalem No. I. S	107	...	...	...	107	...	Notfn. No. 38 of 26th Jan. 1885.	
		Do. „ II. S	268	1	...	50	218	1		
		Vidhullapallo S	166	...	...	...	166	...		
		Kottapalem No. II. S	3,100	5	...	...	3,100	5	Notfn. No. 350 of 11th Oct. 1887.	
		Adavuladivi S	610	1	...	...	610	1		
		Dindi	1,000	2	...	400	600	1		
		Yellichettidibba S	7,680	12	...	3,040	4,640	7½	Notfn. No. 91 of 8th Feb. 1887.	
		Nachugunta S	11,520	18	...	2,880	8,640	14		
		Sorlagundi S	10,240	16	...	7,360	2,880	4		
		Gollapallem S	200	½	190	...	390	½	Notfn. No. 38 of 26th Jan. 1885.	
		Kodúr ... S	38	...	...	...	38	...		
		Palakayatippa S	4,480	7	...	1,600	2,880	4	Notfn. No. 91 of 8th Feb. 1887.	
		Bandar Fort S	8,000	12½	...	500	7,500	12		
	Bandar ...	Kara	20	...	...	20	...	..	...	Transferred to Form 59A.
		Lakshmipuram ...	560	1	...	560	...	...	...	Struck off. Notification No. 3 of 21st Mar. 1889.
		Bomminampadu ...	26	...	...	26	...	...	...	Transferred to Form 59A.
		Vanudhuru ...	64	...	...	64	...	...	...	
		Vemavarampadu ...	16	..	...	16	...	...	...	
		Allinagaram ...	125	...	...	125	...	...	...	
		Kanukolu ... S	600	1	67	...	667	1	Notfn. No. 38 of 26th Jan. 1885.	
		Total ...	438,815	686	500	29,214	410,101	641		
Nellore.	Ongole ...	Chimakurthi ...	7,500	12	...	...	7,500	12	Notfn. No. 185 of 13th Oct. 1883.	
		Ongole ... S	200	...	...	...	200	...	Notfn. No. 205 of 23rd Nov. 1883.	
	Kandukúr ...	Chagollu ... S	1,150	2	...	...	1,150	2	Notfn. No. 96 of 15th Feb. 1887.	
		Buddepudi S	640	1	...	...	640	1		
		Chakicherla S	320	½	...	...	320	½		
		Ramapatam S	1,280	2	...	...	1,280	2		
		Ravúr ... S	1,520	2	...	...	1,520	2		
		Mocherla, Chalamcherla	12,290	19	...	...	12,290	19		
		China Laterapi S	1,000	1½	...	...	1,000	1½		
		Gudlúr ... S	2,800	4½	...	...	2,800	4½		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore—*cont.*	Kávali	Kávali ... S	2,933	5	...	...	2,933	5	Board's Proceedings, No. 3216 F. 647 of 24th Nov. 1885.	
		Kavali ...	1,610	2½	...	...	1,610	2½		
		Rudrakota S	1,800	3	...	...	1,800	3		
		Maddurpad ...	1,000	2	...	1,000	...	...		Transferred to Form 59A and area rectified.
		Narayanapuram S	1,600	3	...	...	1,600	3		
		Zammalapalem ...	1,280	2	...	...	1,280	2		
		Zaladauki	900	1½	...	...	900	1½		
		Gattupalli	960	1½	...	...	960	1½		
		Kesavaram ...	1,800	3	...	...	1,800	3		
		Chira Annalúr ...	2,000	3	...	...	2,000	3		
		Tummalapenta ...	4,240	7	...	...	4,240	7	Notfn. No. 97 of 15th Feb. 1887.	
		Gollapalem ..	960	1½	...	...	960	1½		
		Talapalem ..	960	1½	...	...	960	1½		
		Bitragunta ...	3,400	5	...	...	3,400	5		
		Nagalavaram ...	960	1½	...	...	960	1½		
		Zakkepalle-Gudúr S	800	1	...	...	800	1		
		Chamadala ..	850	1½	...	...	850	1½		
		Manubalpad ...	1,120	2	...	...	1,120	2		
		Dundigam ...	500	1	...	...	500	1		
		Dharmavaram S	200	½	...	...	200	½		
		Munganore ...					94	...		
		Kudanuttla ...					289	½		
		Talapalem ...					761	1		
		Kavali					1,511	2		
		Kolladinne ...	5,000	7	*4,151	...	561	1	Board's Proceedings, F. 371, of 1st July 1887.	*Rectification of area.
		Musunur					1,014	1½		
		Anamadugu ..					941	1½		
		Chennayyapolliem.					1,161	2		
		Tummalapenta ...					2,476	4		
		Rudrakota ...					343	½		
	Kanigiri	Kanigiri	1,500	2	...	...	1,500	2	Notfn. No. 205 of 23 Nov. 1883.	
		Nandavanam ...	17,000	27	...	...	17,000	27	Notfn. No. 190 of 6th July 1888.	
		Vedullacheruvu ...	8,000	13	...	...	8,000	13		
	Udayagiri	Udayagiri Durgam.	7,000	11	...	...	7,000	11	Notfn. No. 185 of 13th Oct. 1883.	
		Yerrakondas ...	2,500	4	...	...	2,500	4	Notfn. No. 238 of 22nd Aug. 1885.	
		Udayagiri(East)and Appasamudram.	1,000	2	...	...	1,000	2	Notfn. No. 243 of 1st July 1887.	
	Atmakur and Udayagiri.	Udayagiri Veligondas.	23,000	36	...	...	23,000	36	Notfn. No. 164 of 10th June 1885.	
		Bommavaram ...	1,500	2	...	...	1,500	2	Notfn. No. 247 of 1st July 1887.	
	Atmakur	Telugurayapuram S	800	1	...	...	800	1	Notfn. No. 101 of 15th Feb. 1887.	
		Turpukambham-padu. S	960	1½	...	...	960	1½		
		Chejerla ... S	1,120	2	...	...	1,120	2		
		Shrisolanu S	1,040	2	...	...	1,040	2		
	Atmakur and Nellore.	Prabagiripatnam ...	1,000	2	...	...	1,000	2	Notfn. No. 247 of 1st July 1887.	
	Nellore	Utukur-Varani Plantations. S	472	½	...	...	472	½	Notfn. No. 205 of 23rd Nov. 1883.	
		Iskapallo	24	...	...	24	...	...	...	Transferred to Form 59A.
		Marripad ... S	1,760	3	...	...	1,760	3	Notfn. No. 99. of 15th Feb. 1887.	
		Turimerla	640	1	...	...	640	1		
		Dagadarti	3,200	5	...	...	3,200	5		
		Kottapalli.. ...	4,480	7	...	...	4,480	7		
		Vavveru	4,160	6½	...	...	4,160	6½		
		Amancherla S	1,440	2	...	...	1,440	2		
		Dontali ... S	1,280	2	...	...	1,280	2		
		Chemudugunta S	320	½	...	...	320	½		
		Kakutur ... S	480	½	...	...	480	½		
		Nellore	2,560	4	...	...	2,560	4		
		Koudlapudi ..	1,440	2	...	...	1,440	2		
		Kandamur S	1,520	2½	...	...	1,520	2½		
		South Mopur S	1,000	1½	...	...	1,000	1½		
		Alipuram ... S	200	...	...	...	200	...	Notfn. No. 250 of 1st July 1887.	

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nellore—*cont.*	Gúdúr	Sriharikot and its outliers.	35,710	56	...	...	35,710	56	Notfn. No. 185 of 13th Oct. 1883.	
		Kottapatam Plantation.	385	1	...	...	385	1	Notfn. No. 205 of 23rd Nov. 1883.	
		Tamminapatnam Plantation. S	485	1	...	...	485	1		
		Yellasari ...	2,080	3	...	...	2,080	3		
		Velliped ... S	720	1	...	...	720	1		
		Ipuru	450	1	...	...	450	1		
		Tamminapatnam, W.	800	1	...	...	800	1		
		Momidi	2,040	3	...	...	2,040	3		
		Aukulapatur .	310	½	...	...	310	½		
		Pidatalapudi S	800	1	...	...	800	1		
		Kadivod ... S	880	1	...	...	880	1		
		Vadur	720	1	...	...	720	1		
		Nellaballi .. S	320	½	...	...	320	½	Notfn. No. 98 of 15th Feb. 1887.	
		Chillakur .. S	480	½	...	...	480	½		
		Gudur ... S	2,400	4	...	...	2,400	4		
		Vondodu ... S	700	1	...	...	700	1		
		Vedicherla	700	1	...	...	700	1		
		Vindur .. S	300	½	...	...	300	½		
		Madamanur ..	400	½	...	...	400	½		
		Idagali ... S	480	1	...	...	480	1		
		Sarvepalli .. S	2,880	4½	...	...	2,880	4½		
		Kanupur .. * S	3,200	5	...	...	3,200	5		*[Part only settled.
		Cherukumudi S	640	1	...	..	640	1		
		Kottapatam ...	2,500	4	...	...	2,500	4		
		Turpupundla	960	1½	...	...	960	1½		
		Sydapuram ...	2,080	3	...	...	2,080	3		
		Chaganam ...	2,720	4	...	...	2,720	4		
		Utukur	640	1	...	...	640	1		
		Turimerla ...	640	1	...	...	640	1		
		Tummalatalpur ..	3,680	6	...	...	3,680	6		
		Marlapudi ...	4,480	7	...	...	4,480	7		
		Pategunta ...	1,600	2½	...	...	1,600	2½		
		Paluru	400	1	...	...	400	1		
		Chikavolu	1,120	2	...	...	1,120	2		
		Cherlopalli ...	3,360	5	...	..	3,360	5		
		Potukonda .	2,240	3½	...	...	2,240	3½		
		Guttikonda .	160	..	...	.	160	...		
		Marellakonda ...	520	1	...	...	520	1		
		Veminabhi ..	2,080	3	...	...	2,080	3	Notfn. No. 100 of 15th Feb. 1887.	
	Rapúr ...	Nellapalli ..	1,840	3	...	...	1,840	3		
		Kakerlakonda ...	3,680	6	...	...	3,680	6		
		Yerragondas ...	17,000	26½	..		17,000	26½		
		Vavintaparti ...	1,280	2	...	..	1,280	2		
		Kummaragunta	480	1	...	...	480	1		
		Pulikollu ..	640	1	...	...	640	1		
		Mogallur	720	1	...	...	720	1		
		Duggunta	960	1½	...	...	960	1½		
		Podalakur ..	1,920	3	.	...	1,920	3		
		Birdavolu ...	2,400	4	...	...	2,400	4		
		Vadlapudi ...	2,400	4	...	...	2,400	4		
		Marupur	3,680	6	...	...	3,680	6		
		Toderu	800	1	...	...	800	1		
		Nernur	2,400	4	...	...	2,400	4		
		Chittaluru ...	480	1	...	...	480	1		
		Ayyagaripalem .	320	½	...	...	320	½	Notfn. No. 506 of 5th July 1887.	
		Griddalur	500	1	...	...	500	1		
	Rapúr and Atmakur.	Rapur Veligondas S	27,000	42	...	...	27,000	42	Notfn. No. 164 of 10th June 1885.	
		Total ...	310,529	488	4,151	1,024	313,656	493		
Cuddapah.	Kódúr ...	Settikunta	960	1½	...	...	960	1½	Collr.'s notice of 7th March 1885.	Left reserved land after settlement.
		Cheyavaram S	4,480	7	...	...	4,480	7	Notfn. No. 304 of 24th July 1886.	
		Kodur	2,160	3½	...	. ...	2,160	3½	Collr.'s notice of 7th March 1885.	Left reserved land after settlement.

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Cuddapah—*cont.*	Kódúr—*cont.*	Gotimanikona S	3,840	6	...	...	3,840	6	Notfn. No. 304 of 24th July 1886.	
		Yerraguntlakota ...	6,400	10	...	...	6,400	10	Collr.'s notice of 7th March 1885.	
		Avalapenta S	960	1½	...	...	960	1½	Notfn. No. 304 of 24th July 1886.	
		Mushtiyeru S	4,480	7	...	...	4,480	7		
		Tippayapalli S	960	2	...	...	960	2		
		Kodivengamabavi...	2,400	4	...	...	2,400	4		
		Marriutla ..	6,400	10	...	...	6,400	10		
	Kódúr and Rajampet.	Seshachellam and Rollamadugu.	3,840	6	...	...	3,840	6	Collr.'s notice of 6th March 1884.	Left reserved land after settlement.
	Rájampet ...	Chitvel ... S	10,240	16	...	...	10,240	16		
		Ananthasamudram .	10,240	16	...	...	10,240	16	Collr.'s notice of 7th March 1885.	
		Sanipaya ghaut ..	3,200	5	...	...	3,200	5		
		Badugantapalle S	3,520	5½	...	...	3,520	5½	Notfn. No. 304 of 24th July 1886.	
	Rájampet and Ráyachóti.	Gadikota	3,538	6	...	...	3,538	6	Collr.'s notice of 6th March 1884.	
		Yerrakonda S	8,320	13	...	...	8,320	13	Notfn. No. 304 of 24th July 1886.	
	Sidhout, Rajampet and Ráyachóti.	Cheyer ... S	11,360	18	...	...	11,360	18	Do. do.	
	Rájampet and Sidhout.	Kanakalakonda S	6,400	10	...	...	6,400	10	Notfn. No. 54 of 14th March 1884.	
		Patur ... S	7,680	12	...	...	7,680	12		
		Kokaletikanama S	14,420	22½	...	...	14,420	22½	Notfn. No. 304 of 24th July 1886.	
		Kothur ... S	22,720	35½	...	...	22,720	35½		
	Sidhout ...	Mallamkonda addition. S	1,280	2	...	...	1,280	2	Notfn. No. 306 of 24th July 1886.	
		Konarazupallo S	9,600	15	...	...	9,600	15	Notfn. No. 54 of 14th March 1884.	
		Turupukonda ...	30,080	47	...	...	30,080	47	Notfn. No. 306 of 24th July 1886.	
		Ippakanama ...	1,600	2½	...	...	1,600	2½	Collr's notice of 7th March 1885.	
	Badvél and Sidhout.	Ramapuram S	7,680	12	...	...	7,680	12	Notfn. No. 54 of 14th March 1884.	
	Badvél ...	Kavalakuntla ...	1,600	2½	...	...	1,600	2½	Notfn No. 54 of 14th March 1884.	Left reserved land after settlement.
		Gopavaram S	13,440	21	...	...	13,440	21		
		Kottakota ... S	38,400	60	...	...	38,400	60		
		Kalasapad	6,400	10	...	...	6,400	10	Notfn. No. 306 of 24th July 1886.	
		Sancherla ... S	5,760	9	...	...	5,760	9		
		Tsallagirigulla ..	1,280	2	...	...	1,280	2	Collr's. notcie of 17th March 1885	
		Badvél	1,920	3	...	...	1,920	3		
	Cuddapah, Badvél and Sidhout.	Lankamalai S	112,640	176	...	...	112,640	176		
	Cuddapah and Sidhout.	Kanamalapalle ...	5,255	8	...	...	5,255	8	Notfn. No. 54 of 14th March 1884.	
	Badvél and Proddutur.	Dassapalle S	66,560	104	...	...	66,560	104		
		Kanchelamoram S	8,960	14	...	...	8,960	14		
	Cuddapah ...	Ganganapalle S	57,600	90	...	...	57,600	90	Collr.'s notice of 3rd March 1885.	
		Chelakampalle ...	9,600	15	...	...	9,600	15		
		Kommaddi S	1,600	2½	...	...	1,600	2½		
		Tummalur S	3,200	5	...	...	3,200	5		
		Gonamakalapalle S	1,280	2	...	...	1,280	2		
	Proddutur and Pulivendla.	Bhanakotamala S	13,600	20	...	...	13,600	20		
		Mallela .. S	5,120	8	...	...	5,120	8		
		Kondasankesula S	4,480	7	...	...	4,480	7		
		Dabbudapalle S	3,280	5	...	...	3,280	5		
		Dhodiyam ... S	2,720	4	...	...	2,720	4	Notfn. No. 304 of 24th July 1886.	
		Malamidikambaladinne. S	3,440	5	...	...	3,440	5		
	Proddutur ...	Penner ... S	640	1	...	...	640	1		
		Gandikota .. S	9,920	15½	...	...	9,920	15½		
		Yamavaram S	1,600	2½	...	...	1,600	2½		
		Kosinepalle S	7,040	11	...	...	7,040	11		
		Nidujubi ... S	2,880	4½	...	...	2,880	4½		
		Kondapuram S	3,840	6	...	...	3,840	6		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Cuddapah—*cont.*	Cuddapah and Ráyachóti.	Idupalayaya S	28,160	44	...	...	28,160	44	Notfn. of 11th June 1883.	
		Redlacheruvu S	5,120	8	...	.	5,120	8	Notfn. No. 304 of 24th July 1886.	
	Cuddapah and Sidhout.	Palkonda .. S	81,920	128	...	...	81,920	128	Notfn. of 11th June 1883.	
	Ráyachoti ...	Madhavaram .	5,120	8	·780	...	5,900	8½	Notfn No. 54 of 14th March 1884.	
		Vandadi hills .	3,200	5	200	.	3,400	5½		
		Brahmanayerragudi	7,680	12	...	...	7,680	12	Collrs.'s notice of 7th March 1885.	
		Hassanapuram	23,240	36	...	...	23,040	36		
		Mudumpad slopes ..	5,760	9	...	...	5,760	9	Notfn. No. 306 of 24th July 1886.	
		Wongimalla S	10,880	17	..	...	10,880	17		
	Ráyachóti and Váyalpád.	Urukonda	8,960	14	. .	...	8,960	14		
	Kadiri and Pulivendla.	Rekkalakonda ...	6,400	10	...	...	6,400	10		
		Gorivikanama . .	28,800	45	...	...	28,800	45	Notfn. No. 54 of 14th March 1884.	
		Dorigullu	30,720	48	...	...	30,720	48		
		Ishwaramala ...	15,360	24	...	. .	15,360	24	Do. do.	
		Kokanti	2,000	3	...	...	2,000	3		
		Kadiri	10,240	16	...	...	10,240	16		
		Vellichelamalla .	3,200	5	...	...	3,200	5	Notfn. No. 305 of 24th July 1886.	
		Thirumaladevara-konda.	9,600	15	...	...	9,600	15	Notfn. No. 54 of 14th March 1884	
		Nigadi	19,640	31	...	...	19,640	31	Notfn. No. 305 of 24th July 1886.	
	Kadiri ..	Kukkarazukonda	5,120	8	...	...	5,120	8	Notfn. No 54 of 14th March 1884.	
		Tumala . ..	25,600	40	...	...	25,600	40		
		Malakavemala- ...	1,920	3	...	...	1,920	3		
		Tummalamala ...	6,400	10	...	...	6,400	10		
		Kondasamerla ...	3,200	5	...	...	3,200	5		
		Sanarazumala, East	1,280	2	...	...	1,280	2		
		Godurelagala	1,920	3	...	...	1,920	3	Notfn. No. 305 of 24th July 1886.	
		Mudupalajuvi . .	1,440	2	...	...	1,440	2		
	Madanapalle...	Tavalam	5,120	8	...	...	5,120	8	Notfn. No. 54 of 14th March 1884.	Avalakonda, Mudimadugu and Horsley-konda. Mallaiakonda and Yaddala-varipalle. Errakasikonda abandoned.
		Madhanikonda ...	1,920	3	...	170	1,750	3		
		Pantzupad ...	1,920	4	950	...	2,870	4½		
		Horsleykonda ...	23,070	36	800	..	23,870	37½		
		Mothugamala ...	2,560	4	...	...	2,560	4		
		Mallaiakonda ...	6,680	10½	8,343	...	15,023	23½		
		Nallakonda ...	3,840	6	...	640	3,200	5		
		Pulikonda	2,560	4	...	...	2,560	4		
		Potapolu	640	1	...	276	364	1		
		Kukarazupalle ...	2,560	4	...	900	1,660	3	Notfn. No. 305 of 24th July 1886.	
	Váyalpád and Madanapalle.	Tarikonda ..	6,400	10	...	...	6,100	10		
		Nurukupalakonda...	5,120	8	...	...	5,120	8		
		Gutapaliem ...	2,560	4	...	...	2,560	4	Notfn. No. 54 of 14th March 1884.	
		Yellutla	4,840	7½	...	...	4,840	7½		
		Gajjbuchikona ...	320	½	...	...	320	½		
		Yerramorullajodu	3,680	5½	...	...	3,680	5½		
		Ankalammakonda..	2,800	4	...	..	2,800	4		
		Nurukupalakonda .	3,700	5½	...	...	3,700	5½		
	Váyalpád ...	Doddipalle ...	2,560	4	...	...	2,560	4	Notfn. No. 306 of 24th July 1886.	
		Sorakayalapeta ...	2,560	4	...	...	2,560	4		
		Poddamallela ..	3,200	5	...	...	3,200	5		
		Marella	7,680	12	...	...	7,680	5		
		Talakona	19,840	31	...	...	19,840	12		
		Bhakarapet . ..	9,800	15	...	...	9,800	31		
								15		
		Total ...	1,061,423	1,656½	11,073	1,986	1,070,510	1,672½		
Kurnool.	Sirvel and Nandyál.	Sirvel ... S	128,000	800	...	...	128,000	200	Notfn. of 21st April 1888.	
	Nandyál and Nandikótkur.	Nandyál . S	192,000	300	...	...	192,000	300		
	Nandikótkur ...	Nandikótkur S	256,000	400	...	...	256,080	400		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kurnool—*cont.*	Cumbum ...	Uyalavada S	448,000	700	...	...	448,000	700	Notfn. No. 198 of 17th Nov. 1883.	
	Cumbum and Markapur ..	Cumbum ... S								
	Markapur ...	Markapur								
	Cumbum ...	Northern Veligondas. S	19,200	30	...	...	19,200	30	Notfn. No. 199 of 17th Nov. 1883.	
		Southern do. S	19,200	30	...	...	19,200	30		
		Western do. ...	10,880	17	...	...	10,880	17		
	Yerramalais ...	Ramallakot ...	4,000	6	...	2,000	2,000	3		Rectification of area.
		Lanjabanda ..	2,000	3	...	..	2,000	3	Notfn. No. 74 of 6th Mar. 1888.	
		Yaipalapadu ...	3,500	5½	...	...	3,500	5½		
		Dhone ...	14,000	22	...	...	14,000	22		
		Gadithemadugu ...	3,000	5	...	...	3,000	5		
		Total ..	1,099,780	1,718½	...	2,000	1,097,780	1,715½		
Bellary.	Adóni ...	Ganekolu ... S	1,118	1¾	...	...	1,118	2	Notfn. No. 175 of 16th Sept. 1884.	
		Badenahalu S	792	1¼	...	...	792	1		
		Katalam ... S	681	1	...	...	681	1		
		Halekota ... S	486	¾	...	...	486	1		
		Sulekeri	1,342	2¼	...	...	1,342	2		
		Halevy ... S	1,145	1¾	...	...	1,145	2		
		Nundavaram S	971	1½	...	...	971	1½		
		Ráyachóti ... S	1,863	2¾	...	...	1,863	3		
		Kurimetta S	3,341	5¼	...	...	3,341	5		
		Bunivasi ... S	1,964	3¼	...	...	1,964	3		
		Kotekallu ... S	2,569	4	...	...	2,569	4		
		Adóni	5,000	8	...	...	5,000	8		
		Kupgul	4,650	7¼	...	...	4,650	7		
		Tungabhadra ...	4,633	7¼	...	...	4,633	7		
		Kosgi	2,970	4¾	...	...	2,970	5		
		Kudbur	2,952	4¼	...	...	2,952	5		
		Gummanur S	649	1	...	...	649	1	Notfn. No. 65 of 20th Feb. 1888.	
	Alúr	Chippigiri S	...	...	1,182	...	1,182	2	Notfn. No. 123 of 27th April 1888.	
		Degalubalu ...	...	...	110	...	110	...		
		Yeruru .. S	...	...	535	...	535	1		
	Bellary ...	Timmapuram S	1,267	2	...	...	1,267	2	Notfn. No. 87 of 20th March 1888.	
		Bellary	8,000	12½	...	...	8,000	12	Notfn. No. 51 of 12th March *1884.	Equivalent in square miles has been rectified.
		Mincheri	4,000	6¼	...	...	4,000	6		
		Gound	3,000	4¾	...	...	3,000	5	Notfn. No. 197 of 16th Nov. 1883.	
		Hospet	5,000	8	...	...	5,000	8		
		Jog	4,000	6¼	...	...	4,000	6		
		Oblagudi	1,000	1½	...	...	1,000	1½	Notfn. No. 197 of 16th Nov. 1883.	
	Hospet ...	Tornagul	2,100	3¼	...	...	2,100	3	Notfn. No. 102 of 17th May 1884.	
		Billekal	...	...	14,000	...	14,000	22	Notfn. No. 22 of 21st Jan. 1889.	
		Buckasagar ...	..	...	8,000	...	8,000	12		
	Kudligi and Hospet	Bandri	7,000	11	...	...	7,000	11	Notfn. No. 197 of 16th Nov. 1883.	
	Kudiligi ...	Sherbi	3,000	4½	...	...	3,000	5	Notfn. No. 174 of 13th Sept. 1884.	
		Gollalinganhalli ..	1,000	1½	...	...	1,000	1½		
		Tumurgudi ..	2,500	4	...	...	2,500	4		
		Somalapur ...	1,000	1½	...	...	1,000	1½	Notfn. No. 79 of 26th Mar. 1889.	
		Sunkadakal ...	7,000	11	843 *	...	7,843	12½		
		Shivpur	9,000	14	..	...	9,000	14		
		Banavikal	...	...	3,000	...	3,000	5	Notfn. No. 79 of 26th Mar. 1889.	
		Nimblagiri ..	...	..	4,800	...	4,800	7½		
		Gadekota	...	...	7,000	...	7,000	11		
	Hadgalli and Harpanhalli.	Harada	18,000	28¼	...	...	18,000	28	Notfn. of 14th Jan. 1885.	
		Sogay	4,200	6½	...	...	4,200	6½		
	Harpanhalli ...	Jitnakatta ...	...	...	12,646	...	12,646	20	Notfn. No. 116 of 20th April 1888.	
		Jangukalgutta ...	...	...	12,882	...	12,882	20		
		Alagilanada ...	...	...	1,956	...	1,956	3		
		Uchangidrug ...	..	...	4,291	...	4,291	7		
	Ráyadrug ...	Rayadrug ...	6,000	9¼	...	...	6,000	9	Notfn. No. 150 of 21st May 1885.	
		Dharmapuri	3,600	5½	...	...	3,600	5½		
		Argupa	1,000	1½	...	...	1,000	1½		
		Boodikonda ..	...	...	1,000	...	1,000	1½	Notfn. No. 187 of 8th June 1888.	
		Total ...	128,793	201¼	72,245	...	201,038	314		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1889.		Number and date of notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Anantapúr.	Gooty...	Peddadoddi ...	3,200	5	...	...	3,200	5	Notfn. No. 203 of 20th May 1887.	
		Jakkulacheruvu ...	3,200	5	...	...	3,200	5		
		Pamidi	640	1	...	...	640	1		
		Nagasamudram ...	9,600	15	...	...	9,600	15		
		Cutturmulla ...	7,680	12	...	...	7,680	12		
		Bhadrampalle ...	2,560	4	...	...	2,560	4		
		Marutla	11,520	18	...	...	11,520	18		
		Tarramalla ...	8,960	14	...	...	8,960	14		
		Yadaki	5,120	8	...	...	5,120	8	Notfn. No. 134 of 28th Feb. 1887.	
	Muchukota ...	Muchukota S	7,040	11	...	640	6,400	10	Notfn. No. 191 of 6th Oct. 1884.	Rectification of area.
		Durgam ... S	3,200	5	...	...	3,200	5	Notfn. No. 205 of 20th May 1887.	
		Kudair	4,480	7	...	...	4,480	7		
		Upparapalli ...	640	1	...	...	640	1		
		Dadithota	1,920	3	...	...	1,920	3	Notfn. No. 134 of 28th Feb. 1887.	
		Yellutla	5,120	8	...	...	5,120	8		
		Chillawaripalle ...	3,840	6	...	...	3,840	6		
		Konukuntla ...	1,280	2	...	...	1,280	2		
		Nairjampalle ...	1,920	3	...	...	1,920	3		
		Yelanur	320	½	...	...	320	½		
	Dharmavaram.	Gootoor ... S	3,200	5	3,200	...	6,400	10	Notfn. No. 166 of 8th May 1886.	Rectification of area.
		Kalyandrug S	960	1½	...	...	960	1½	Notfn. No. 8 of 22nd Dec. 1886.	
		Ramgherry ...	10,240	16	...	...	10,240	16		
		Bhadrapoor S	3,200	5	...	...	3,200	5		
		Nyalakota S	7,680	12	...	...	7,680	12	Notfn. No. 166 of 8th May 1886.	
		Narsampalli ...	2,560	4	...	2,560	...	...	...	Transferred to Form 59A. Entered last year by mistake.
	Penukonda ...	Penukonda hill S	1,600	2½	...	...	1,600	2½	Notfn. No. 166 of 8th May 1886.	
		Somandapally S	10,240	16	...	...	10,240	16		
		Yerlampalle S	2,240	3½	...	...	2,240	3½		
		Mallappakonda ...	5,120	8	...	...	5,120	8		
		Mallakaveimlakonda ... S	960	1½	...	...	960	1½	Notfn. No. 166 of 8th May 1886.	
		Naradikonda S	2,560	4	...	...	2,560	4		
		Janavaripalle ...	...	...	3,200	...	3,200	5	Notfn. No. 74 of 26th Oct. 1888.	
		Agraharam ...	...	...	2,300	...	2,300	3½		
		Venglumcheruvu.	...	...	2,880	...	2,880	4½		
		Yerrakonda S	3,920	6	500	...	4,420	7	Notfn. No 166 of 8th May 1886.	Rectification of area.
	Hindupur ...	Amagondapalium S	16,360	25½	...	...	16,360	25½		
		Dokulkonda S	2,880	4½	...	...	2,880	4½		
		Kondur	...	...	400	...	400	⅔	Notfn. No. 252 of 8th Aug. 1888.	
		Gopidevarapalle ...	...	...	1,920	...	1,920	3		
		Total ...	155,960	243½	14,400	3,200	167,160	261		
Nílgiris.	Ootacamund...	Nanjanad	1,327	2	...	1,327	...	...		Already transferred to Form 59A.
		Chemenguli ...	901	1½	...	901	...	...		
		Fern Hill Shola S	14	...	...	4	10	...	Notfn. No. 428 of 8th Nov. 1886.	
		Addition to Fairlawns block No. I.S	22	...	...	...	22	...		
		Addition to Doddabetta block No. II.S	17	...	...	5	12	...		
		Addition to Dodabalta ... S	10	...	...	...	10	...		
		Bilikal road S	25	...	...	...	25	...		
	Naduvatam ...	Naduvatam ...	35	...	...	35	...	...	...	Rectification of area.
		Devamalai ...	114	...	115	...	229	½	Notfn. No. 54 of 24th May 1885.	Rectification of area.
	Sigúr	Sigúr	48,022	75	...	6,895	41,127	64		Rectification of area to exclude villages.
	Coonoor ...	Honnathalai (south) S	218	½	...	...	218	½	Notfn. No. 168 of 20th April 1886.	
		Bettumand S	137	...	...	...	137	...		
		Rallia	382	½	...	...	382	½		
		Little Rallia S	29	...	...	...	29	...		
		Rallia Shola S	30	...	...	...	30	...		
		Ijalakaray S	172	½	½	...	172	½		

Area of Reserved Lands, 1888-89—*cont.*

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Nilgiris—*cont.*	Coonoor—*cont.*	Teppakuchi S	119	...	...	...	119	½		
		Billithittu ... S	35	...	...	...	35	...		
		Dolphin ... S	65	...	...	...	65	...		
		Guernsey ... S	14	...	...	...	14	...		
		Kodámálai S	15	...	...	...	15	...		
		Naduhatti ...	509	1	...	...	509	1		
		St.Catharine'sFallS	124	½	...	...	124	½		
		Constantia S	35	...	...	...	35	...		
		Tuttapolliam S	54	...	...	...	54	...		
		Gudakalhalla S	299	½	...	...	299	½		
		Bettu Nos.1 and 2.S	29	...	...	...	29	...		
		Kunnavara addition ... S	97	...	...	...	97	...		
		Kanavatti ... S	16	...	...	...	16	...		
		Deepdale ... S	361	½	...	...	361	½		
		Gudakal ... S	600	1	...	...	600	1		
		Clyffe ... S	33	...	...	...	33	...		
		Yercaudhalla S	20	...	...	...	20	...		
		Konakarai slopes S	1,864	3	...	...	1,864	3		
		Doddabetta S	105	...	...	...	105	...		
		Shamrock .. S	43	...	...	...	43	...		
		Bikkehatti S	19	...	...	...	19	...		
		Ittakal, Nos. 1. and 2 ... ... S	21	...	...	...	21	...	Notfn. No 108 of 20th April 1886.	
	Kotágiri ...	Mavada ... S	211	½	...	...	211	½		
		Kuttada, Nos. 1 and 2 ... ... S	29	...	...	...	29	...		
		Vagapanni S	2,648	4	...	...	2,648	4		
		Denad ... S	2,072	3	1	...	2,073	3	.....	Rectification of area.
		Sundatti ... S	124	...	...	...	124	¼		
		Kunshola ... S	159	1	...	...	159	1		
		Kirkanara, Nos. 1 and 2 ... S	24	...	...	...	24	...		
		Kellatti ... S	17	...	...	...	17	...		
		Hadumund S	48	...	...	...	48	...		
		Uppatti ... S	53	...	...	...	53	...		
		Doddakavu S	62	...	...	...	62	...		
		Ullavanad shola S	57	...	...	...	57	...		
		Sinnattu shola S	51	...	...	...	51	...		Rectification of area.
		Madanad ... S	722	1	1	...	723	1		
		Kodanad Valley S	294	¼	...	..	294	¼		
		Nadukaduhalla ...	908	1½	...	...	908	1½		
		Nedugula ... S	89	½	...	...	89	½		
		Longwood additions ... S	31	...	...	...	31	...		
	Kullár ...	Kullár additions S	72	...	...	...	72	...		
		Benhope, No. 2 S	34	...	...	...	34	...		
		Jakanare slopes S	6,419	10	...	...	6,419	10		
		Kallúr ... S	388	½	...	...	388	½		
		Total ...	70,444	109	117	9,167	61,394	96		
		Grand Total ...	4,073,369	6,367½	116,736	79,951	4,110,154	6,424		

Annual Form No. 59-D.

Forest Department, Madras, Northern Circle.

Area of Leased Forests, 1888-89.

District.	Range.	Name of Forest.	Area on 1st April 1888. Acres.	Area on 1st April 1888. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1889. Acres.	Area on 31st March 1889. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Bellary ...	Sandúr ...	Sandúr ...	40,000	62½	...	...	40,000	62½	...	Rectification of area.
Nilgiris ...	Mudumalai ...	Mudumalai ...	87,285	136	...	40,646	46,639	73		
		Total ...	127,285	198½	...	40,646	86,639	135½		

Annual Form No. 60.

Forest Department, Madras, Northern Circle.

Area of Plantations, 1888-89.

District.	Range.	Name of plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Godávari.	Narsápur ...	Rustambadu ...	24	4,153	...	44	24	4,197	1866-67.
		Sitarampuram ..	26				26		
	Amalápuram	Bendamurlanka (old).	27	2,014	...	...	27	2,014	1875-76.
		Do. (new).	20	1,312	...	78	20	1,390	1882-83.
		Total ..	97	7,479	...	122	97	7,601	
Kistna.	Bandar ...	Kara	14	387	...	...	14	387	
		Weld	75	3,384	...	732	75	4,116	1885.
		Kodúr	40	287	...	48	40	335	
		Gopavanipalem .	25	764	10	328	35	1,092	
		Kanukolu ...	137	1,589	10	647	147	2,236	
		Allinagaram ...	125	823	1	56	126	879	
		Korlapadu ...	20	229	− 20	− 229	..	...	Sold.
		Bommuinampadu ..	26	358		49	26	407	
		Vemavarampadu .	16	272	...	1	16	273	
		Vanudhuru .	25	402	1	49	26	451	
	Bezváda ...	Ibrampatnam ...	24	368	− 24	55 / − 423	...	...	Exchanged for lands in Kondapalle Reserved Forest.
		Gavuravaram ...	30	286	...	65	30	351	
	Bápatla ...	Bápatla	21	636	1 / − 5	98 / − 150	17	584	5 acres cleared.
		Karlapalem ...	79	4,053	...	168	79	4,221	
		Vidhullapalle ...	13	467	...	...	13	467	
		Wardarevu ...	72	3,643	...	84	72	3,727	
		Nayanapalli ...	12	1,172	...	84	12	1,256	
		Pandhillapalli ...	14	510	...	84	14	594	
		Total ...	768	19,630	23 / − 49	2,548 / − 802	742	21,376	
Nellore.	Casuarina Plantation.	Dugarázpatam ...	615	39,363	80 / − 130	1,753 / − 227	565	40,889	1873.
		Kothapatnam ...	460	30,210	50 / − 25	1,353 / − 117	485	31,446	Rectification of figures.
		Tamminapatam ...	499	43,620	20	804 / − 115	519	44,399	1873.
		Utukúr	180	16,110	...	72	180	16,182	1875.
		Varani	292	34,732	...	48	292	34,780	1874.
	Kávali ...	Tummalapenta .	100	18,717	...	70	100	18,787	1873.
		Ramapatam .	60	19,555	...	65	60	19,620	
		Kothapatam ...	146	14,714	...	52	146	14,766	
		Kanuparthi . .	250	16,546	...	52	250	16,598	1873.
	Sríharikót ...	Chandrasikuppam.	10	670	...	48	10	718	
	Nellore ...	Allipuram ...	39	9,287	... / − 39	3 / − 9,290	...	...	Already cleared.
	Atmakúr ...	Mamudur	9	1,434	...	...	9	1,434	
		Total ...	2,660	2,44,958	150 / − 194	4,410 / − 9,749	2,616	2,39,619	
Cuddapah.	Kódúr ...	Kódúr	37	7,084	...	78	37	7,162	1865.
		Uparapalle ...	108	8,399	...	75	108	8,474	1869.
		Reddipalle ...	925	13,304	...	74 / + 3	925	13,381	1870. Tangedu sowings cost.
		Arimanabanda ...	4	774	...	72	4	846	1884.
		Pullagundlamadugu	30	228	25	+ 62	55	290	1887. Transferred from cultural operations.

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of Plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			ACS.	RS.	ACS.	RS.	ACS.	RS.	
Cuddapah—*cont.*	Rájampet ...	Pullampet ...	426	8,036	...	48 + 146	426	8,230	1871. Tangedu sowings cost, 119 acres completed.
	Cuddapah ...	Kamalápuram ...	332	10,225	... + 122	192 + 376	454	10,793	1869. Plamyra and other sowings.
		Total ...	1,862	48,050	+ 147	539 + 587	2,009	49,176	
Nilgiris	Mudumalai ...	Mudumalai ...	61	16,770	...	64	61	16,834	
		Benne	40	11,180	...	119	40	11,299	
	Naduvatam ...	Northernhay ...	23	10,209	... - 23	70 -10,279	...	...	Struck off.
	Ootacamund ...	Chemenguli ...	33	3,861	...	...	33	3,861	1879.
		Mutbanád	95	6,713	...	...	95	6,713	1880-83.
		Brooklands ...	10	328	...	...	10	328	1862.
		Marliamund ...	11	833	...	...	11	833	1860.
		Snowdon	7	214	...	8	7	222	1860.
		Governor's shola ...	277	10,603	...	22	277	10,625	1880.
		Aramby	220	13,898	13	1,824	233	15,222	1863.
		Cairn Hill	160½	12,075	8	1,267	168½	13,342	1877.
		Lovedale	1½	851	1 - 2½	231 - 1,082	...	...	Transferred to cultural operations.
	Melúr	Devashola	14	1,640	...	...	14	1,640	1880.
	Coonoor ...	Blackbridge ...	56	1,921	...	...	56	1,921	1874.
		Bleakhouse ..	235	4,704	- 54	83	87	2,344	1857. Rectification.
		Bandyshola ...				25	94	2,468	1857. Rectification.
		Coonoor peak ...	210½	6,597	24	754	234½	7,351	1872.
		Tippakutchi ...	35	783	...	...	35	783	1882.
		Rallia	105	2,571	...	17	105	2,588	1872.
		Ghát reserve .	9	406	3 - 12	60 - 466	...	...	Transferred to cultural operations.
		Sim's park ...	2	1,031	4 - 6	993 - 2,024	...	...	Transferred to cultural operations.
	Kótagiri ...	Longwood	7	128	... - 7	201 - 329	...	...	Transferred to cultural operations.
	Kullar	Kullar	92½	3,039	27	1,303	119½	4,342	1886.
		Municipal assessment.	...	1,752	...	...	...	1,752	
		Total ..	1,705	1,12,107	80 - 104½	6,541 -14,180	1,680½	1,04,468	

CULTURAL OPERATIONS.

Ganjam.	Chokapad ...	Mojagodo	3½	720	- 3½	- 720	...	...	Small teak experimental plantation.
		Miscellaneous items	...	..	...	103	...	103	
		Total ...	3½	720	- 3½	103 - 720	...	103	
Vizagapatam.	Pálkonda ...	Voni	25	1,460	- 25	- 1,460	...	...	Not really plantations, but groups of tended sál.
		Lakshmipuram ...	26		- 26				
		Total ...	51	1,460	- 51	- 1,460	...	...	
Kistna.	Bezváda ...	Bezváda	...	70	...	83	...	153	Sowings, &c., in blanks.
		Total ...	...	70	...	83	...	153	

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			Acs.	Rs.	Acs.	Rs.	Acs.	Rs.	
Nellore.	Kavali	...	50	324	...	...	50	324	Miscellaneous sowings in forest and among prickly-pear.
	Sríharikót ...	Sríharikót ...	10	1,353	100	172	110	1,525	Miscellaneous plantings.
		Total ...	60	1,677	100	172	160	1,849	
Cuddapah.	Kódúr ...	Ballipalle	2	1,032	...	133	2	1,165	Nursery.
		Do. Working Circle, Compartment 5 B.	12	9	...	...	12	9	
		Do. do. 6 B.	30	245	...	74	30	319	Filling blanks.
		Pullagundlamadugu	25	62	− 25	− 62	...	...	Transferred to plantations.
		Sandakona ...	5	146	...	29	5	175	Watering and filling blanks.
	Rájampet ...	Pullampet ...	107	146	− 107	− 146	...	...	Transferred to plantations.
		Reddipalle ...	7	3	− 7	− 3	...	...	
	Cuddapah ...	Kamalapuram ...	121¼	376	− 121¼	− 376	...	...	
		Appaiapalle ...	25¼	29	...	...	25¼	29	
	Proddutur ...	Gandikota ...	321	18	...	...	321	18	
		Pennér banks ...	160	199	...	...	160	199	3,000 palmyra seeds sown by watcher.
	Kádiri	Nigadi	4	...	− 4	...	...	...	Coara rubber trees, struck off.
	Madanapalli ...	Horsleykonda ...	1	39	...	...	1	39	Nursery.
		Do. ...	1½	12	...	25	1½	37	Filling blanks, Eucalyptus and Acrocarpus.
		Basinikonda ...	¼	...	− ¼	...	...	...	Struck off.
	Váyalpád ...	Ankalammakonda.	22	61	...	...	22	61	
		Nurukupalakonda.	5	41	...	...	5	41	
		Total ...	849	2,418	− 264½	{ 261 / − 587 }	584½	2,002	
Kurnool.	Nandyál ...	Nandyál	...	...	...	57	...	57	Nursery for Eucalyptus.
		Miscellaneous items	...	...	...	4	...	4	Haloxylon, &c.
		Total ...	...	...	...	61	...	61	
Bellary.	Hospet ...	Gandlavattugiri ...	4	...	− 4	...	...	...	Omitted as they are not plantations, but natural babul tracts.
		Nayanahalli ...	10	...	− 10	...	...	...	
	Sandúr ...	Ramandrug ..	...	56	...	52	...	108	Nursery.
		Hampi .	...	...	...	20	...	20	
		Miscellaneous .	..	...	.	75	...	75	Nursery for dates.
		Total ...	14	56	− 14	147	...	203	
Nilgiris.	Ootacamund ...	Lovedale	...	...	1¼	+ 851	2¼	1,082	Transferred from plantations. Bucklandia and indigenous plants were planted in blanks.
					1	+ 231			
	Coonoor ...	Ghát reserve ...	...	...	9	+ 406	12	466	Transferred from plantations. Acer Campbellii, casuarina and indigenous kinds in blanks.
					3	+ 60			
		Lambs rock ...	...	...	2	25	2	25	Indigenous kinds in blanks.

Area of Plantations, 1888-89—*cont.*

District.	Range.	Name of plantation.	On 1st April 1888.		Added during 1888-89.		On 31st March 1889.		Remarks.
			Area.	Cost.	Area.	Cost.	Total Area.	Total Cost.	
			Acs.	Rs.	Acs.	Rs.	Acs.	Rs.	
Nilgiris—*cont.*	Coonoor—*cont.*	Sim's park ...	...	...	2 4	+ 1,031 + 993	6	2,024	Transferred from plantations, exotic kinds, such as Bucklandia, Grevillea robusta and different kinds of gums.
	Kotagiri ...	Longwood ...	...	...	7	+ 128 + 201	7	329	Transferred from plantations.
		Miscellaneous items	...	...	...	657	...	657	Municipal assessment wrongly charged to this head.
		Total ...	...	...	29½	682 + 3,901	29½	4,583	
		Total Plantations...	7,092	4,32,224	52½	14,158 – 24,144	7,144½	4,22,238	
		Total Cultural Operations.	977½	6,401	– 203½	1,511 + 1,134	774	9,046	
		Add Topes .	6,865	1,09,357	...	2,215	6,865	1,11,572	
		Direction	...	...	...	50	...	50	
		Grand Total A-VIII, d .	14,934½	5,47,982	– 151	17,934 – 23,010	14,783½	5,42,906	

Annual Form No. 61.

Forest Department, Madras, Northern Circle.

Annual Statement of Topes.

District.	Taluk.	Number of topes.	Area.	Cost		Remarks.
				During year.	To end of year.	
			ACS.	RS.	RS.	
Ganjam	Berhampore	3	13	...	922	
	Gúmsur	1	83	...		
	Chicacole	3	5	...		
	Total ...	7	101	...	922	
Vizagapatam ...	Pálkonda	2	56	...	8	
	Total ...	2	56	...	8	
Godávari	Rámachendrapuram ...	8	30	...	...	
	Total ...	8	30	...	...	
Kistna	Bandar	2	9	108	704	
	Gudiváda	1	5	16	281	
	Bezváda	1	4	...	238	
	Nandigáma	1	11	59	342	
	Vinukonda	1	6	48	305	
	Narsaraopet	1	7	48	274	
	Sattenapalle	1	6	...	15	
	Bápatla	1	2	...	1,298	
	Répalle	1	1	...	...	
	Guntúr	1	3	...	...	
	Not accounted for ...	...	...	104	104	
	Total ...	11	54	383	3,561	
Nellore	Gúdúr	11	124	...	3,206	
	Rápúr	15	183	...	8,533	
	Nellore	33	380	...	6,599	
	Atmakúr	3	12	...	4,420	
	Venkatagiri	9	180	...	2,793	
	Kávali	17	742	...	4,190	
	Udayagiri	4	29	...	2,665	
	Kandukúr	6	13	...	1,853	
	Kanigiri	5	19	...	1,408	
	Ongole	4	107	...	1,212	
	Podili	4	13	...	1,165	
	Total ...	111	1,752	...	38,044	
Cuddapah	Pullampet	8	69	132	5,690	
	Sidhout	4	40	48	8,144	
	Badvél	6	63	205	2,884	
	Proddutur	2	32	5	1,715	
	Jammalamadugu	9	309	69	12,500	
	Pulivendla	10	638	157	5,039	
	Cuddapah	7	148	60	6,103	
	Kadiri	8	73	11	2,186	
	Madanapalle	8	68	144	6,554	
	Ráyachóti	5	95	24	1,647	
	Váyalpád	3	30	...	3,442	
	Total ...	70	1,565	855	55,904	
Kurnool	Ramallakot	7	66	...	839	
	Pattikonda	5	29	...	1,879	
	Koilkuntla	4	9	...	3,683	
	Nandikótkur	1	2	56	361	
	Nandyál	3	33	56	1,233	
	Sirvel	2	16	96	570	Rectification.
	Cumbum	2	13	...	22	
	Márkápur	3	14	...	257	
	Total ...	27	182	208	8,844	

Annual Statement of Topes—*cont.*

District.	Taluk.	Number of topes.	Area.	Cost		Remarks.
				During year.	To end of year.	
			Acs.	Rs.	Rs.	
Bellary	Bellary	6	86	...	...	
	Kúdligi	4	9	...	...	
	Hadgalli	2	11	...	41	
	Harpanahalli	2	3	...	...	
	Alúr	11	101	...	88	
	Adóni	2	13	47	326	
	Rayádrug	4	17	93	274	
	Total ...	31	240	140	729	
Anantapur ...	Anantapur	5	124	166	316	
	Gooty	10	184	75	178	
	Tadpatri	15	565	48	171	
	Dharmavaram	29	1,555	110	2,380	
	Hindupur	16	121	36	206	
	Penukonda	15	310	146	216	
	Madaksira	5	26	48	98	
	Total ...	95	2,885	629	3,560	
	Grand Total ...	362	6,865	2,215	1,11,572	

ANNUAL FORM No. 62.

Forest Department, Madras, Northern Circle.

Area of Forest Tracts protected from Fire during 1888-89.

District and Range.		Forest Tract.	On 1st April 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
			Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
			ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Ganjam ...	Chokapád ...	Dimrijholi ...	...	...	5,480	16	5,464	14	14	1889	
		Rambha	...	...	9,300	...	9,300	26	26		
		Darpangia and Baibali.	21,753	1,008	38,080	130	37,950	56	1,064	1885	
	Bodoboro-singhi.	Gullory	...	...	23,860	73	23,787	24	24		
		Koolada	...	...	2,760	54	2,706	14	14		
		Teleki	...	...	15,200	70	15,130	22	22		
		Kaliamba ...	...	...	5,200	20	5,180	23	23		
		Rogada	...	...	16,000	14	15,986	22	22		
		Vinjagheri ...	...	...	6,000	5	5,995	12	12		
		Malati	...	...	1,720	...	1,720	28	28	1889	
	Pondokol ...	Hukuma ...	...	...	4,160	5	4,155	10	10		
		Rayigoda ...	...	...	6,700	8	6,692	10	10		
		Bondagocha ...	...	...	4,400	1	4,399	7	7		
		Pippalapanka ...	...	...	7,700	3	7,697	10	10		
		Dhougam ...	...	...	2,400	9	2,391	10	10		
		Moondapitta ...	...	...	6,880	...	6,880	10	10		
	Gayagonda ...	Ambazara and Chondorgiri.	4,490	1,068	50,320	13,041	37,279	90	1,158	1885	
	Jagannath-prasád.	Jagannathprasád.	...	...	26,200	2,010	24,190	43	43		
		Paichalia ...	...	...	13,760	1,983	11,777	15	15		
		Brahmanossi ...	...	...	8,080	1,012	7,068	15	15		
	Boogooda ...	Vishnuchakram...	...	...	4,860	270	4,590	7	7		
		Panchbuthi ...	...	...	4,320	460	3,860	10	10	1889	
		Kurcholi ...	...	...	5,520	630	4,890	10	10		
		Kriyamba ...	...	...	23,320	1,054	22,266	19	19		
		Sandusalya ...	...	...	2,000	...	2,000	5	5		
		Bodochendana ...	...	...	800	...	800	5	5		
	Berhampore ..	Mohiri hills ...	18,230	606	18,230	200	18,030	154	760	1885	
		Total ...	44,473	2,682	313,250	21,068	292,182	671	3,353		
Vizagapatam.	Sarvásiddhi ...	Peddapalli ...	...	...	8,960	30	8,930	...	...	1889	
		Total ..	...	...	8,960	30	8,930	...	...		
Godávari ...	Bhadrachá-lam.	Dumagudem ...	...	...	6,110	1,920	4,190	5	5	1887-88	
		Arlagudem ...	...	...	6,136	1,920	4,216	5	5		
		Gogulaka ...	...	...	1,666	320	1,346	3	3	1888-89	
	Marrigudem.	Rapak ..	...	...	7,000	7,000	...	9	9	1887-88	
		Ramchandram ...	8,080	...	10,300	1,920	8,380	9	9		
		Tatlunka ...	9,440	...	12,000	2,560	9,440	...	..		
	Rajahmundry	Kothapalli ...	5,000	57	18,000	20	17,980	49	106	1887	
		Devancheruvu ...	2,350	41	2,330	...	2,330	33	74		
		Ramasaram ...	1,300	...	1,250	...	1,250	14	14	1888	
		Kovida ...	...	...	1,280	...	1,280	6	6	1889	
		Murari ...	...	...	900	...	900	6	6		
	Ellore ...	Velagalapalle ...	2,560	...	2,200	...	2,200	16	16		
		Chintalapudi ...	2,560	...	1,100	...	1,100	16	16		
		Barrikonda ...	3,640	...	2,700	150	2,550	32	32		
		Erraguntapalli ...	...	...	9,600	200	9,400	31	31	1888	
		Bandamcherla ...	6,400	...	5,200	...	5,200	32	32		
		Ramasingavaram.	1,920	...	1,920	...	1,920	16	16		
		Tadikalapudi ...	2,560	...	2,560	...	2,560	16	16		
		Total ...	45,810	98	92,252	16,010	76,242	298	396		
Kistna ..	Bezvada ...	Kondapalle ...	8,320	1,807	8,320	...	8,320	560	2,367	1884	Specially protected.
	Vinukonda ...	Bollapalli ...	6,400	800	6,400	60	6,340	95	895		
	Palnad ...	Mutukur ...	6,400	195	6,400	...	6,400	61	256	1885	
		Madinapadu ...	1,920	304	9,600	...	9,600	76	380		
	Guntur ..	Kondavid ...	...	...	13,165	12	13,153	8	8	1888	
		Total ...	23,040	3,106	43,885	72	43,813	800	3,906		

Area of Forest Tracts protected from Fire during 1888-89—*cont.*

District and Range.	Forest Tract.	On 1st April 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Nellore ... Rápúr ...	Rápúr Veligondas.	25,240	195	27,000	2,900	24,100	242	437	1885	
Udayagiri ...	Udayagiri do.	21,400	446	23,000	1,500	21,500	561	1,007		
Kanigiri ...	Kanigiri do.	23,800	...	25,000	2,100	22,900	...	...		
	Total ..	70,440	641	75,000	6,500	68,500	803	1,444		
Kodur ...	Ballipallo (West).	6,307	1,889	6,307	...	6,307	277	2,166	1867	
	Do. (East).	8,460	2,065	8,960	31	8,929	373	2,438	1871	
	Kodur Hill ...	6,840	1,496	7,440	900	6,540	277	1,773	1874	
	Vagetikona ...	3,595	609	3,595	1	3,594	95	704		
	Yerraguntlakota..	1,435	1,185	3,000	...	3,000	177	1,362	1873	
	Rallakonda ...	1,565	428	1,565	...	1,565	102	530	1879	
	Gathela ...	6,780	737	6,800	2	6,798	121	858	1874	
	Thanakonda	1,042	474	1,048	...	1,048	54	528		
Rajampot ...	Rollamadugu ...	5,424	309	5,424	...	5,424	53	362	1878	
	Srirangarazupallem.	5,000	967	5,000	1,920	3,080	226	1,193	1883	
	Vattalúr Hill ...	2,880	174	2,880	...	2,880	82	256	1887	
Kadiri ...	Nigadi	13,950	823	14,000	...	14,000	95	918		
	Malakavemala ...	8,500	439	8,500	...	8,500	...	439		
	Kondagamerla ...	3,700	219	3,700	...	3,700	12	231		
	Tumala ...	2,495	227	2,495	...	2,495	36	263		
	Kokanti	2,000	199	2,000	...	2,000	12	211		
	Gorivikanama ...	18,000	209	18,000	...	18,000	...	209		
Madanapalle.	Rekkalakonda ...	1,200	178	1,200	...	1,200	15	193		
	Mallaiakonda ..	2,200	205	2,200	...	2,200	24	229		
	Kosuvaripalle ...	1,400	143	1,400	...	1,400	9	152	1881	
	Sompalle ...	800	98	800	...	800	...	98		
	Horsleykonda ...	9,630	582	9,630	...	9,630	106	688		
	Yellutla	3,500	225	3,500	...	3,500	28	253		
	Nadimicherla ...	2,000	219	2,000	...	2,000	...	219		
Vayalpad ...	Nurukupalakonda.	3,600	396	3,600	...	3,600	63	459		
	Ankalammakonda	2,000	390	2,000	...	2,000	42	432		
	Gorantlapalle ...	4,000	210	4,000	...	4,000	12	222		
Cuddapah... Cuddapah ...	Mamillapalle ...	3,000	981	5,000	...	5,000	227	1,208	1888	
Cuddapah and Rayachoti.	Guvalacheruvu ...	7,600	817	7,600	2,100	5,500	222	1,039	1888	
Rayachoti ...	Gadikota ...	11,480	839	12,480	171	12,309	186	1,025	1888	
	Sibyala ...	3,500	48	3,500	...	3,500	45	93	1887	
	Tsundupalle ...	3,000	28	3,000	...	3,000	21	49		
Sidhout ...	Arapayakanama..	...	791	10,000	1,780	8,220	445	1,236	1888	
	Kanamalapalle ...	4,435	628	4,435	2,500	1,935	219	847	1887	
Badvel ...	Kottakota ...	8,537	597	8,640	...	8,640	164	761	1885	
Proddutur ...	Mudireddipalle ...	12,000	817	12,000	1,941	10,059	113	930	1883	
	Rameswaram ...	91	29	91	...	91	...	29		
	Thallamapuram ..	153	34	153	...	153	...	34		
	Volleia ...	258	34	258	...	258	...	34		
	Alladupalle ...	197	33	197	...	197	...	33		
	Payadala ...	99	19	99	...	99	...	19		
	Nidujubi ...	696	101	696	...	696	9	110		
	Kottapalle ...	120	19	120	...	120	...	19		
	Kalamella ...	730	147	730	...	730	13	160		
	Kosinepalle ...									
	Modanattupalle...	86	18	86	...	86	...	18		
	Anantapuram ...	138	19	138	...	138	...	19	1881	
	Kallúr ...	160	17	160	...	160	...	17		
	Kondasankesula..	858	95	858	...	858	15	110		
	Gandikota ...	372	93	372	...	372	...	93		
	Yamavaram ...	200	91	200	...	200	...	91		
Jammalamadugu.	Dhodiem	1,345	102	1,345	...	1,345	15	117		
	Murupandi ...									
	Malamidikambaladinne.	1,366	141	1,366	...	1,366	15	156		
	Kodur									
	Aravetipalle ...	850	106	850	...	850	10	116		
	Denepalle ...									
	Peddadudiala ...									
	Total ...	189,574	21,739	205,418	11,346	194,072	4,010	25,749		

Area of Forest Tracts protected from Fire during 1888-89—*cont.*

District and Range.		Forest Tract.	On 1st April 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
			Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
			ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Kurnool ...	Atmakur	Atmakur-Velgode	14,500	2,480	...	..	...	...	2,480	1884	
	Nandikotkur	Bairluti ...	2,250	275	4,000	3,500	500	438	713	1887	
	Nandyal ...	Mallalamma ...	...	...	2,000	200	1,800	122	122	1889	
	Markapur ...	Rollapenta ...	...	...	3,600	3,600	...	78	78		
	Cumbum ...	Western Veligondas.	...	...	10,880	3	10,877	196	196		
	Pattikonda ...	Tekukonda ...	...	...	1,600	...	1,600	6	6		
		Total ...	16,750	2,755	22,080	7,303	14,777	840	3,595		
Bellary ...	Sandur ...	Sandur ...	2,750	1,259	2,750	...	2,750	131	1,390	1883	
		Hospet ...	1,050	826	1,050	1,050	...	50	876		
		Venkatagiri ...	1,150	409	1,150	1,150	...	55	464		
		Gound ...	5,050	942	5,050	1,000	4,050	242	1,184		
		Gurga ...	2,430	783	2,430	...	2,430	116	899		
		Kanavahalli ...	4,160	878	4,160	...	4,160	200	1,078		
		Dharmapúr ...	2,150	534	2,150	...	2,150	102	636		
		Bosapúr ...	2,230	371	2,230	...	2,230	92	463		
		Konapur ...	1,960	355	1,960	...	1,960	82	437	1885	
		Hunsehalli ...	3,760	529	3,760	1,200	2,560	157	686		
		Kákubola ...	3,240	504	3,240	3,240	...	136	640		
		Joga ...	2,440	463	2,440	1,180	1,260	102	565		
		Medarhalli ...	2,380	415	2,380	2,380	...	93	508		
		Yettinahalli ...	2,403	336	2,443	...	2,443	118	454		
		Basapur ...	419	60	419	...	419	21	81	1886-87	
		Hosahalli ...	1,206	167	1,206	...	1,206	59	226		
		Muthukalpeta ...	1,342	185	1,342	...	1,342	61	246		
		Appanahalli ...	1,239	172	1,239	...	1,239	60	232		
		Oblagundi ...	2,069	287	2,069	...	2,069	100	387		
		Lingathahalli ..	486	68	486	...	486	24	92		
		Shivpur ...	9,000	504	9,000	...	9,000	113	617		
	Western Range.	Sherbi ...	3,000	129	3,000	...	3,000	100	229	1885	
		Sunkudakal ...	7,000	99	7,000	...	7,000	54	153	1886-87	
		Malpanagudi ...	2,698	433	3,000	...	3,000	68	501		
	Bellary ...	Forest tract protected by ordinary staff.	97,553	...	...	...	...	...	...	1884	
		Total ...	163,165	10,708	65,954	11,200	54,754	2,336	13,044		
Anantapur	Penukonda	Kottakota ...	5,040	1,022	5,120	1,000	4,120	251	1,273	1884	
	Muchukota ...	Muchukota ...	16,000	3,032	6,400	...	6,400	602	3,634		
	Hindupur ..	Amagondapolliam.	15,360	895	16,360	30	16,330	252	1,147		
		Dokulkonda ...	2,880	83	2,880	...	2,880	31	114	1885	
		Somarazmalai ...	1,920	84	1,920	...	1,920	42	126		
	Penukonda ...	Narsampalli ...	1,280	31	1,280	...	1,280	56	87	1886	
		Mallappakonda ...	5,120	56	5,120	...	5,120	24	80		
	Dharmavaram.	Gootoor ...	3,200	67	6,400	...	6,400	176	243	1887	
		Kalyandrug, North and South.	...	...	960	...	960	42	42	1889	
		Total ...	50,800	5,270	46,440	1,030	45,410	1,476	6,746		
Nílgiris ...	Mudumalai...	Mundumalai Plantation.	61	1,440	61	...	61	85	1,525	1883	
		Mudumalai compartments Nos. 1 to 8 in Block II and 8 camping grounds.	...	...	341	...	341	153	153	1888	
		Benne Plantation.	40	960	40	...	40	48	1,008	1886	
		Benne Plantation, part of Block No. I.	...	...	500	200	300	85	85	1888	
		Moyar	13,238	220	13,238	12,838	400	52	272	1886	

Area of Forest Tracts protected from Fire during 1888-89—*cont.*

District and Range.	Forest Tract.	On 1st April 1888.		During dry season of 1888-89.				Total cost up to 31st March 1889.	Year when protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Area burnt.	Area actually protected.	Amount expended.			
		ACS.	RS.	ACS.	ACS.	ACS.	RS.	RS.		
Nílgiris—*cont.* Sigur ...	Kulhatti Slopes ...	9,554	183	9,554	8,000	1,554	126	309	1886	
	Sigur	48,022	63	48,022	45,000	3,022	46	109		
Naduvatam.	Naduvatam Sholas.	13,825	173	12,137	5	12,132	72	245	1885	
	Northern Hay ..	23	737	3,998	18	3,980	75	812	1883	
	South-East Wynaad Reserve.	...	102	3,500	...	3,500	47	149	1886	
Ootacamund.	Marliamund ...	172	275	211	...	211	47	322	1883	
	Aramby ...	426	243	430	...	430	53	296		
	Cairn Hill ...	492	269	559	...	559	78	347		
	Brooklands ...	..	...	176	...	176	12	12	1888	
	Lovedale ...	385	227	296	...	296	36	263	1883	
	Craigmore ...	...	...	299	...	299	11	11	1888	
	Doddabetta ...	904	116	991	...	991	29	145	1886	
	Snowdon ...	1,053	94	1,053	...	1,053	26	120	1883	
	Jakuntha ...	370	24	373	...	373	18	42	1886	
	Muthanad ...	457	245	420	...	420	22	267	1883	
	Governor's Shola.	1,521	684	2,670	7	2,663	132	816		
	Pykara	1,055	150	1,309	50	1,259	34	184		
	Sandynulla ..	818	24	818	...	818	17	41	1886	
	Kongodu ...	415	24	451	...	451	16	40		
	Kodcoopa ...	1,622	20	1,622	...	1,622	9	29		
	Pichelbettu ...	2,991	27	2,991	200	2,791	17	44		
Coonoor ..	Hulikal ...	6,411	321	6,411	...	6,411	83	404	1883	
	Rallia	1,154	382	848	...	848	124	506		
	Black Bridge ...	390	154	390	...	390	41	195		
	Coonoor Peak ...	540	405	540	...	540	88	493		
	Lamb's Rock ..	708	296	708	...	708	55	351		
	Tiger Hill ..:	328	166	328	...	328	20	186		
	Ghat Reserve ...	311	340	311	...	311	54	394		
	Hill Grove ...	187	143	187	...	187	30	173		
Kotagiri ...	Pillur Slopes ...	2,332	72	3,221	...	3,221	55	127	1887	
	Halakaray ...	13	15	420	...	420	43	58		
	Kotagiri ...	635	602	660	...	660	108	710	1885	
	Jakanaré ...	523	13	213	...	213	16	29	1886	
	Konakarai ...	918	8	6,758	...	6,758	20	28	1887	
	Do. Slopes ...	1,843	7	1,864	...	1,864	16	23		
	Kengaré ...	304	28	428	...	428	11	39		
	Vagapanai Slopes.	2,633	6	2,648	41	2,607	13	19		
	Denad	2,188	14	2,444	44	2,400	21	35		
	Kodanad ...	974	23	2,236	...	2,236	28	51		
	Ithalar	461	37	460	...	460	13	50	1886	
Melur ..	Devashola ...	214	97	215	...	215	53	150	1883	
	Balakola ...	930	83	935	...	935	84	167	1886	
	Athigarhatti ...	34	6	34	...	34	2	8	1887	
	Commandu ...	1,045	179	1,167	...	1,167	52	231	1883	
	Kundahs ...	45,269	271	45,448	5,000	40,448	66	337	1885	
Kullar ...	Burliyar ...	1,630	648	2,275	60	2,215	438	1,086	1883	
	Jakanare Slopes.	6,419	83	6,419	400	6,019	102	185	1886	
	Total ...	175,838	10,699	193,628	71,863	121,765	2,982	13,681		
	Grand Total ...	779,890	57,698	1,066,867	146,422	920,445	14,216	71,914		

ANNUAL FORM No. 63.

Forest Department, Madras, Northern Circle.

Prosecutions for Breaches of Forest Rules during 1888-89.

District.	Cases pending from 1887-88.	NEW CASES OF THE YEAR.						Total Cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.			CONVICTIONS.		ACQUITTALS.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Ganjam ...	19	1	52	2	2	57	76	27	54	14	41	41	95	35	
Vizagapatam.	16	...	271	5	4	280	296	203	402	52	159	255	561	41	
Godávari ...	11	...	23	2	2	27	38	13	42	16	73	29	115	9	
Kistna ...	20	...	83	4	21	108	128	74	225	18	53	92	278	36	
Nellore ...	24	2	42	...	5	49	73	32	84	13	85	45	169	28	
Cuddapah ...	11	9	253	95	7	364	375	284	687	84	141	368	828	7	
Kurnool ...	1	31	95	11	30	167	168	109	271	53	149	162	420	6	
Bellary ...	6	1	69	8	...	78	84	42	85	35	74	77	159	7	
Anantapur ...	13	6	41	6	2	55	68	34	79	28	109	62	188	6	
Nilgiris ...	4	1	10	1	7	19	23	16	35	3	22	19	57	4	
Total ...	125	51	939	134	80	1,204	1,329	834	1,964	316	906	1,150	2,870	179	

	Cases compounded under section 55 of the Madras Forest Act.												Amount for which compounded.
													Rs. A. P.
Ganjam ...	...	...	124	2	1	127	127	25	27	...	...	25	27	251 5 0
Vizagapatam. N.D.	...	...	9	...	9	18	18	18	56	...	...	18	56	102 4 2
Vizagapatam. S.D.	...	...	54	...	...	54	54	54	61	...	...	54	61	20 9 0
Godávari ...	...	...	9	...	...	9	9	9	9	...	...	9	9	58 7 4
Kistna ...	...	...	87	...	15	102	102	102	132	...	...	102	132	159 14 0
Nellore ...	...	...	41	...	...	41	41	41	216	...	...	41	216	60 0 0
Cuddapah ...	...	...	118	1	1	120	120	120	354	...	...	120	354	938 0 0
Kurnool ...	...	...	5	1	1	7	7	7	9	...	...	7	9	36 5 0
Bellary ...	...	...	25	...	...	25	25	25	26	...	...	25	26	21 6 0
Anantapur ...	...	...	21	...	...	21	21	21	88	...	...	21	88	154 12 6
Nilgiris ...	...	...	5	...	...	5	5	5	7	...	...	5	7	15 0 0
Total ...	...	...	498	4	27	529	529	427	985	...	...	427	985	1,817 15 0

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

Summary of Revenue of the different districts, 1888-89.

Budget heads, Receipts.	Direction.	Ganjam.	Vizagapatam.	Godávari.	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government Agency—												
(a) Timber	...	8,817	38	28	20	...	339	432	687	81	10,860	21,302
(b) Firewood and charcoal	...	293	...	18	39	41,853	137	44	1,825	1	17,766	61,986
(c) Bamboos	...	...	...	...	...	...	...	...	1,615	...	...	1,615
(d) Sandal-wood ...	...	...	...	...	...	...	...	...	...	...	6,965	6,965
(e) Grass and other minor produce	...	8	...	...	...	4,186	1,310	99	55	228	2,542	8,428
II.—Timber and other produce removed from the forests by consumers or purchasers—												
(a) Timber	...	507	971	34,755	24,062	7,325	21,115	39,199	5,512	3,332	3,855	1,40,033
(b) Firewood and charcoal.	...	10,191	2,920	5,999	8,457	352	40,405	31,440	4,819	1,022	2,698	1,08,303
(c) Bamboos	...	2,659	2,145	14,395	1,851	...	8,318	18,387	59	338	2,907	51,059
(d) Grazing and fodder grass.	...	...	20	1,456	49,442	14,769	2,018	6,232	442	957	2,123	77,459
(e) Other minor produce	...	777	552	8,393	12,801	5,700	30,878	9,801	25,348	23,046	439	1,17,735
III.—Confiscated drift and waif-wood	...	65	112	8,368	286	38	798	1,937	38	879	10	12,531
IV.—Revenue from forests not managed by Government...	...	20	...	...	...	...	...	...	...	...	...	20
V.—Miscellaneous—												
(a) Fines and forfeitures.	...	6	1	3	25	...	69	...	51	...	7	162
(b) Refunds	32	156	5	22	33	15	19	71	...	...	22	375
(c) Other sources	23	332	126	3,153	1,248	228	1,480	252	100	498	907	8,347
Total, Receipts ...	55	23,831	6,890	76,590	98,264	74,466	1,06,886	1,07,894	40,561	30,382	51,101	6,16,920

MADRAS,
11th June 1889.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 64.

Forest Department, Madras, Northern Circle.

Summary of expenditure of the different districts, 1888-89.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nílgiris.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A.—Conservancy and Works.												
I.—Timber and other produce removed from the forests by Government Agency—												
(*a*) Timber ...	..,	14,501	10	29	...	...	15,515	248	83	4	2,892	33,277
(*b*) Firewood and charcoal ...	...	409	...	14	8	24,394	33	48	507	...	13,111	38,524
(*c*) Bamboos ...	...	...	...	...	...	...	107	...	442	...	...	549
(*d*) Sandalwood ...	...	...	...	...	...	...	...	...	...	...	1,830	1,830
(*e*) Grass and other minor produce.	...	18	...	...	...	2,022	402	361	12	292	1,428	4,535
II.—Timber and other produce removed from the forests by consumers or purchasers ...	...	2,055	1,656	5,039	2,213	208	5,590	8,807	224	762	2,032	28,586
III.—Confiscated drift and waif wood ...	...	1,756	18	1,160	9	2	70	327	...	17	...	3,359
IV.—Revenue from forests not managed by Government—												
V.—Rent of leased forests, and payments to shareholders in forests managed by Government ...	...	...	...	...	...	...	...	...	10,900	...	3,500	13,500
VI.—Live stock, stores, tools and plant—												
(*a*) Purchase of cattle ...	...	...	...	6,553	...	...	...	...	...	...	...	6,553
(*b*) Feed and keep of cattle ...	...	...	...	1,685	...	...	...	...	...	...	1,626	3,311
(*c*) Stores, tools and plant ...	110	186	56	768	2,135	17,680	99	337	199	386	302	22,208
VII.—Communications and buildings—												
(*a*) Roads and bridges ...	...	807		2,475	212	...	2,448	559	...	4	2,729	9,234
(*b*) Buildings ...	...	2,575	37	338	1,307	571	1,806	5,023	296	678	1,826	14,457
(*c*) Other works ...	...	27	...	...	116	...	159	...	...	...	...	302
VIII.—Demarcation, improvement and extension of forests—												
(*a*) Demarcation ...	...	2,129	645	4,158	4,416	2,992	3,316	1,566	543	862	2,431	23,058
(*b*) Compensation for land and rights ...	12	25	...	504	6,354	468	...	...	50	939	98	8,450
(*c*) Surveys and working plans ...	360	558	...	49	29	360	24	173	60	...	...	1,613
(*d*) Plantations ...	50	103	...	122	3,014	4,582	1,655	269	287	629	7,223	17,934
(*e*) Protection from fire ...	...	671	...	298	800	803	4,010	840	2,336	1,476	2,982	14,216
(*f*) Other works ...	...	200	2	1	990	127	1,098	14	479	73	2,003	4,987
IX.—Miscellaneous—												
(*a*) Refunds ...	1	767	7	40	365	536	357	133	28	...	21	2,255
(*b*) Law charges ...	5	...	1	1	5	136	8	20	...	27	210	416
(*c*) Other charges.	197	234	31	39	55	14	55	345	115	16	43	1,144
Total A.—Conservancy and works	735	27,021	2,463	23,273	22,031	54,845	36,752	19,065	15,661	6,165	46,287	2,54,298

MADRAS,
11th June 1889.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 64.

Forest Department, Madras, Northern Circle.

Summary of expenditure of the different districts, 1888-89.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godávari	Kistna.	Nellore.	Cuddapah.	Kurnool.	Bellary.	Anantapur.	Nilgiris.	Total.
B.—"*Establishments.*"	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Brought forward, Total A. "Conservancy and Works."	735	27,021	2,463	23,273	22,031	54,845	36,752	19,065	15,661	6,165	46,287	2,54,298
I.—Salaries—												
(*a*) Conservators	12,879			...	...				...	..	..	12,879
(*b*) Superior officers	16,594	7,707	1,194	5,100	6,206	6,600	5,650	4,590	1,250	1,560	1,537	58,288
(*c*) Subordinate forest and depôt establishments.	4,033	4,311	2,530	7,470	7,227	6,163	10,376	6,001	5,566	5,850	7,687	67,214
(*d*) Office establishments.	13,759	2,093	848	1,514	1,734	2,325	2,242	1,483	1,127	1,255	2,045	30,425
(*e*) Deputation and special allowances.	..	...		...	...	...	...	...	...		...	...
II.—Travelling allowances—												
(*a*) Conservators ...	3,380	...	..		..	..		...	...	...	..	3,380
(*b*) Superior officers ..	3,400	1,909	49	1,367	1,795	1,717	1,420	1,731	508	471	640	15,007
(*c*) Subordinate forest and depôt establishments.	1,279	1,530	517	2,948	2,097	1,563	2,487	2,102	1,388	1,606	2,294	19,811
(*d*) Office establishments.	1,857	311	207	222	387	200	314	212	151	367	66	4,294
III.—Contingencies—												
(*a*) Stationery	18	53	3	1	...	11	..	6	...	...	8	100
(*b*) Carriage of tents and records.	470	111	129	69	195	102	93	30	68	99	3	1,369
(*c*) Rents, rates and taxes.	198	75	20	180	60	..	30	...	160	22	385	1,130
(*d*) Pay of police guards.	...	..		...	...	...	...			...	...	...
(*e*) Official postage ...	663	301	99	322	374	382	333	305	161	186	181	3,307
(*f*) Sundries	1,330	205	58	114	89	198	80	82	58	254	566	3,040
Total B. "Establishments" ...	59,866	18,606	5,654	19,607	20,164	19,261	23,025	16,542	10,437	11,670	15,412	2,20,244
Grand Total of expenditure ..	60,601	45,627	8,117	42,880	42,195	74,106	59,777	35,607	26,098	17,835	61,699	4,74,542

Madras,
11th June 1889.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 65

Forest Department, Madras, Northern Circle.

Outstandings and Liabilities on account of Contractors and Disbursers for 1888-89.

District.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Conservator, Northern Circle	...	1,458 2 0	1,458 2 0	193 11 3	1,269 11 1	1,463 6 4	6 4 4	...
Two-fifths of Examiner's office	...	344 0 1	344 0 1	24 2 4	324 9 2	348 11 6	4 11 5	...
Forest Settlement-officer, Nellore and Bellary ..	...	254 10 4	254 10 4	2 10 4	271 0 0	273 10 4	19 0 0	...
Do. do. Kurnool, Kistna and Godavari	...	.....	...	...	.....	...	.....	...
Forest School, Dehra Dun	...	141 4 9	141 4 9	171 4 9	30 0 0	141 4 9	.....	...
Ganjam	...	54,493 6 11	54,493 6 11	3,665 13 8	53,896 9 4	57,562 7 0	3,069 0 1	...
Vizagapatam	...	6,045 2 8	6,045 2 8	29 7 2	6,662 6 10	6,691 14 0	646 11 4	...
Godávari	...	25,637 13 10	25,637 13 10	1,929 2 11	26,210 7 11	28,139 10 10	2,501 13 0	...
Kistna	...	26,790 6 10	26,790 6 10	1,186 4 0	26,698 5 6	27,884 9 6	1,094 2 8	...
Nellore	..	78,250 12 0	78,250 12 0	28,042 10 1	51,210 1 9	79,252 11 10	1,001 15 10	...
Cuddapah	...	36,691 2 1	36,691 2 1	271 13 10	36,926 7 6	37,198 5 4	507 3 8	...
Kurnool	...	15,528 0 3	15,528 0 3	2,114 6 10	14,125 4 1	16,239 10 11	711 10 8	...
Bellary	...	11,167 2 3	11,167 2 3	226 14 4	11,387 15 2	11,614 13 6	447 11 3	...
Anantapur	...	10,870 6 6	10,870 6 6	228 7 11	10,978 0 0	11,206 7 11	336 1 5	...
Nilgiris	..	19,149 5 4	19,149 5 4	1,594 3 8	18,833 6 2	20,427 9 10	1,278 4 6	...
Total ..	...	2,86,821 11 10	2,86,821 11 10	39,681 1 1	2,58,764 4 6	2,98,445 5 7	11,823 9 9	...

MADRAS,
11th June 1889.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

ANNUAL FORM No. 66

Forest Department, Madras, Northern Circle.

Revenue received and Outstandings on account of Revenue during 1888-89.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	Timber and other produce ..	...	54 3 7	54 3 7	54 3 7	..
Ganjam	Do. ...	1,651 7 4	22,611 10 4	24,263 1 8	23,831 7 4	431 10 4
Vizagapatam ...	Do. ...	...	6,889 15 1	6,889 15 1	6,889 15 1	.
Godávari	Do. ...	...	76,589 5 2	76,589 5 2	76,589 5 2	..
Kistna	Do. ...	1,746 0 1	98,728 15 4	1,00,474 15 5	98,263 7 7	2,211 7 10
Nellore	Do. ...	75 10 0	74,461 6 5	74,537 0 5	74,466 5 2	70 11 3
Cuddapah	Do. ...	18 12 0	1,06,931 5 4	1,06,950 1 4	1,06,886 15 6	63 1 10
Kurnool	Do. ...	...	1,07,894 7 4	1,07,894 7 4	1,07,894 7 4	...
Bellary	Do. ...	2 4 0	40,559 0 11	40,561 4 11	40,561 4 11	...
Anantapur	Do. ...		30,382 6 4	30,382 6 4	30,382 6 4	...
Nilgiris	Do. ...	238 3 11	51,895 12 3	52,134 0 2	51,100 15 8	1,033 0 6
	Total ..	3,732 5 4	6,16,998 8 1	6,20,730 13 5	6,16,920 13 8	3,809 15 9

MADRAS,
11th June 1889.

(Signed) C. G. DOUGLAS,
Examiner of Forest Accounts.

Annual Form No. 67.

Forest Department, Madras, Northern Circle.

Financial results of the year 1888-89.

District.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	9,118	27,548	14,719	8,895	16,456	23,837	52,899
Vizagapatam ...	38	10	6,854	5,741	4,790	6,892	10,541
Godávari	46	7,307	76,551	20,251	22,594	76,597	50,152
Kistna	59	8	98,212	17,824	31,635	98,271	49,467
Nellore	46,039	45,843	28,434	5,519	30,016	74,473	81,378
Cuddapah	1,786	23,623	1,05,107	19,282	24,145	1,06,893	67,050
Kurnool	575	652	1,07,326	23,014	19,213	1,07,901	42,879
Bellary	4,192	2,571	36,373	12,351	16,024	40,565	39,046
Anantapur	310	296	30,076	9,507	12,880	30,386	22,683
Nilgiris	38,133	30,423	12,972	11,575	24,549	51,105	66,547
Total ...	1,00,296	1,38,281	5,16,624	1,33,959	2,02,302	6,16,920	4,74,542

Annual Form No. 68.

Forest Department, Madras, Northern Circle.

Trees felled by Government Agency during the year 1888-89.

District.	Range, forest or working circle.	Description of trees.	Number of trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Disposed of during the year: Number.	Balance at the end of the year.	Remarks.
									Outturn.
Ganjam	Gayagonda range.	Sál	40	1,194	1,234	Converted .	1,194	40	2,563 logs.
		Sajo	5	...	5	...	.	5	
		Dhau	8	...	8	...	...	8	
		Blackwood.	...	4	4	Converted...	2	2	4 logs.
		Miscellaneous . .	15	165	180	Do. ...	180	...	350 ,,
	Jaggannathprasad range.	Sál	...	903	903	Do. ...	903	...	1,584 ,,
		Miscellaneous ...	...	1	1	Do. ...	1	...	1 ,,
	Buguda range ...	Sál	...	329	329	Do. ...	279	50	508 ,,
	Chokapad range.	Sál	...	817	817	Do. ...	817	...	1,976 ,,
		Piasál	...	2	2	Do. ...	2	.	5 ,,
		Sajo	...	14	14	...	...	14	
		Ebony	...	3	3	...	...	3	
		Miscellaneous ...	...	18	18	Converted...	5	13	11 logs.
	Bodoborosingi range.	Sál	..	400	400	Do. ...	400	...	1,154 ,,
		Sajo	...	1	1	Do. ...	1	...	3 ,,
	Pondokol range.	Sál	...	33	33	Do. ..	33	...	4 ,, and firewood.
		Sajo	...	16	16	Do. ...	16	...	12 ,,
		Dhau	...	13	13	Do. ...	13	..	7 ,,
		Piasál	...	1	1	Do. .	1	...	1 ,,
		Satinwood	...	1	1	Do. ...	1	...	2 ,,
		Miscellaneous ...	...	26	26	Do. ...	26	...	26 ,,
	All ranges ..	Bamboos	...	12,160	12,160	Used departmentally.	12,160	...	
		Total, Ganjam ...	68	16,101	16,169	...	16,034	135	
Vizagapatam	Palkonda range.	Sál	...	29	29	Converted...	29	...	29 rafters.
		Nallamaddi	...	8	8	Do. ...	8	...	8 logs.
		Miscellaneous ...	...	11	11	Do. ...	11	...	11 ,,
		Total, Vizagapatam	..	48	48	. .	48	...	
Godávari ...	Bhadrachalam	Ironwood	154	138	292	Converted ..	156	136	156 logs.
		Nallamaddi ...	128	177	305	Do. ..	123	182	123 ,,
		Chiriman ...	6	40	46	Do. ...	31	15	31 ,,
		Miscellaneous ...	39	20	59	Do. ...	40	19	40 ,,
		Total, Godávari ..	327	375	702	...	350	352	
Kistna . .	Guntúr range ...	Babul	...	255	255	Converted .	255	...	Poles and fuel.
		Total, Kistna ...	...	255	255	...	255	...	
Cuddapah ...	Nallamalai forest.	Teak	...	2	2	Converted...	2	...	2 logs 15 cubic feet.
	Idupalapaya ...	Palmyra	...	10	10	Sold ...	10	...	
	Kodúr and Káyachoti.	Bamboos	...	7,461	7,461	Used departmentally.	550	6,911	
		Total, Cuddapah ..	...	7,473	7,473	...	562	6,911	
Kurnool ...	Nandyal forest...	Yegi	...	20	20	Converted...	20	...	447 felloes. 903 spokes.
		Total, Kurnool ...	...	20	20	...	20	...	
Bellary ...	Sandúr ...	Bamboos	...	58,187	58,187	Sold ...	58,187	...	
		Total, Bellary ...	...	58,187	58,187	...	58,187	...	

Trees felled by Government Agency during the year 1888-89—*cont.*

District.	Range, forest or working circle.	Description of trees.	Number of trees: On hand at commencement of the year.	Felled during the year.	Total.	Disposed of during the year: How disposed of.	Disposed of during the year: Number.	Balance at the end of the year.	Remarks.	Outturn. Lots.	Outturn. Cubic feet stacked or solid.
Anantapur	Penukonda range.	Palmyra	...	12	12	Converted and used departmentally.	12	...	Outturn. 80 rafters. 32 reepers.		
		Margosa	...	4	4	Do. ...	4	...	30 logs.		
	Khojjapalle forest.	Palmyra	...	3	3	Used departmentally.	3	...	Demarcation posts.		
	Muchukota forest.	Yepi	...	1,575	1,575	Sold ..	1,575	...			
		Total, Anantapur ...	...	1,594	1,594	...	1,594	..			
Nilgiris ...	Cairn Hill working circle.	Eucalyptus ...	...	2,049	2,049	Converted...	2,049	...		468½	46,850
	Aramby working circle.	Do. ...	...	3,811	3,811	Do. ...	3,811	...		636½	63,650
	Governor's shola working circle.	Do. ...	...	191	191	Do. ...	191	...		40	4,000
	Coonoor Peak working circle.	Do. ...	..	4,136	4,136	Do. ...	4,136	...		1,469½	146,925 firewood.
										2,184	2,184 drag poles.
	Bandy shola working circle.	Acacia	...	410	410	Do. ...	410	...		185	18,500 firewood.
										59	59 planks.
										272	136 rafters.
	Bleakhouse working circle.	Eucalyptus ...	...	112	112	Do. ...	112	...		47½	4,750 firewood.
										680	680 poles.
										260	130 rafters.
										3	3 planks.
	Rallia working circle.	Eucalyptus ...	...	517	517	Do. ...	1,322	...		333½	33,350
		Acacia	...	805	805						
	Bonné reserved forest.	Teak	...	392	392	Do. ..	392	...		444	11,263
		Vengai ...	...	156	156		156	...		142	4,640
		Blackwood ...	...	59	59		59	...		59	2,066
		Mutti	...	140	140		140	...		152	5,941
		Total, Nilgiris ..	...	12,778	12,778	...	12,778	...			
Abstract ...	...	Teak	...	394	394	...	394	...			
		Sál ...	40	3,705	3,745	...	3,655	90			
		Blackwood	..	63	63	...	61	2			
		Ironwood	154	138	292	...	156	136			
		Yepi	...	1,575	1,575	...	1,575	...			
		Yegi	...	179	179	...	179	...	Includes "*Vengai*," Tamil "*Piasál*," Uriya.		
		Nallamaddi	133	356	489	...	288	201	Includes "*Matti*," Tamil "*Sajo*," Uriya.		
		Chiriman	14	53	67	...	44	23	Includes "*Dhau*," Uriya.		
		Satinwood	...	1	1	...	1	...			
		Ebony	...	3	3	...	...	3			
		Babúl	...	255	255	...	255	...			
		Margosa	..	4	4	...	4	...			
		Palmyra	..	25	25	...	25	...			
		Eucalyptus ...	...	10,816	10,816	...	10,816	...			
		Acacia	...	1,215	1,215	...	1,215	...			
		Miscellaneous ...	54	241	295	...	263	32			
		Bamboos ...	...	77,808	77,808	...	70,897	6,911			
		Total ...	395	96,881	97,226	...	89,828	7,398			

ANNUAL FORM

Forest Department,

Statement of Timber and other Produce cut and collected

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Ganjam ...	Gayagonda forests.	Sál logs	215	1,964	2,578	42,206
		Do. sleepers	...	...	2,798	7,273
	Chondorgiri forest.	Sál planks	...	...	127	...
	Gundribadi and Gogodo forests.	Sál slabs	...	...	2,160	...
		Do. demarcation posts ...	3,688	2,171	12	8
		Piasál logs .	1	7	...	...
		Saja do. ...	4	60	...	...
		Ebony do. ...	4	24	...	...
		Blackwood do. ...	...	...	4	50
		Miscellaneous logs ..	17	335	350	540
		Planks	..	...	64	...
	Hatiguda F.D. ..	Sál sleepers	...	...	150	525
	Kodologoda F.D.	Sál logs	...	...	150	2,700
		Do. sleepers	...	...	42	147
		Do. slabs	...	...	80	...
	Talikomono F.D.	Sál sleepers	...	...	400	1,200
		Do slabs	...	...	715	...
	Gayagonda F.D.	Sál logs	...	...	807	12,810
		Do. sleepers	...	...	2,730	6,596
		Do. slabs	...	...	2,318	...
		Blackwood logs ...	...	...	3	39
		Miscellaneous logs. ...	...	...	1	14
	Tilsingi F.D. ...	Sál logs and poles ...	...	...	98	564
		Do. planks	...	...	46	...
		Do. slabs	...	...	242	...
		Do. demarcation posts...	...	...	120	83
		Blackwood logs ...	...	...	1	11
		Miscellaneous logs ...	...	...	356	540
		Do. planks ...	...	...	197	...
	Chondorgiri F.D.	Sál poles	...	..	48	240
		Do. planks	...	...	18	...
	Dongabhumi F.D....	Sál sleepers	...	...	303	1,060
	Paichalia F.D. ...	Sál logs	...	...	1,584	22,201
		Do. sleepers	...	...	1,001	3,054
		Do. slabs	...	...	1,272	...
		Miscellaneous logs ...	...	...	1	14
	Rambha F.D. ...	Sál logs	...	...	868	13,075
		Do. sleepers	...	...	2,344	7,414

No. 69.

Madras, Northern Circle.

by Government Agency during the year 1888-89.

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
		Sold	88	590			
		Used departmentally.	26	356			
		Converted into sleepers.	1,362	22,966			
		Converted into planks.	14	305			
2,793	44,170	Sent to Gopalpur D	4	71	196	3,568	
		Do. Chondorgiri ...	48	240			
		Do. Tilsingi ..	98	564			
		Do. Gayagonda ...	807	12,810			
		Do. Kodulogodo ...	150	2,700			
		Sent to Russelcondah.	928	2,708.			
		Do. Dongabhumi.	303	1,060			
2,798	7,273	Do. Talikomono	400	1,200	400	60	
		Do. Gayagonda ..	617	1,720			
		Do. Hatiguda ..	150	525			
		Sent to Chondorgiri .	18	...			
127	...	Do. Tilsingi ...	46	...	...	...	
		Used departmentally.	63	...			
		Sold	58	...			
		Used departmentally.	2	...			
2,160	...	Sent to Gayagonda ..	1,325	...	50	...	
		Do. Tilsingi ...	27	...			
		Do. Talikomono ..	698	...			
		Used departmentally.	2,980	2,096			
3,100	2,179	Sent to Tilsingi ...	120	83	...	...	
1	7	Sold	1	7	...	...	
4	60	Do.	2	12	2	48	
4	24	Do.	4	24	..	...	
4	50	Sent to Tilsingi ..	1	11	...	...	
		Do. Gayagonda ...	3	39			
..		Sold	4	46			
		Loss on remeasurement	...	10			
367	875	Converted into planks.	6	180	1	99	
		Sent to Tilsingi ...	356	540			
64	...	Do. ...	64	...	...	...	
150	525	.. ...	...	...	150	525	
150	2,700	Converted into sleepers.	21	336	129	2,364	
42	147	... ..	...	...	42	147	
80	..	.. ...	...	..	80	...	
400	1,200	Sent to Russelcondah.	400	1,200	...	...	
715	...	... ..	...	...	715	...	
807	12,810	Converted into sleepers.	707	11,528	100	1,282	
2,730	6,596	Sent to Russelcondah.	2,722	6,566	8	30	
2,318	...	Sold	86	...	2,101	...	
		Sent to Tilsingi ...	131	...			
3	39	Used departmentally.	1	13	...	...	
		Sent to Russelcondah.	2	26			
1	14	Used departmentally.	1	14	...	...	
98	564	Do. ...	98	564	...	...	
46	...	Do. ...	2	...	44	...	
242	...	Sent to Talikomono ...	17	...	73	...	
		Used departmentally.	152	...			
120	83	.....	...	...	120	83	
1	11	Used departmentally.	1	11	....	...	
356	540	Converted into planks.	24	506	2	34	
		Used departmentally.	330	...			
197	...	Do. ...	129	...	68	...	
48	240	Do. ...	48	240	...	...	
18	...	Do. ...	18	...	...	...	
303	1,060	Sent to Russelcondah.	303	1,060	...	...	
		Do. ..	1	13			
1,584	22,201	Sent to Rambha ...	868	13,075	20	270	
		Converted into sleepers.	695	8,843			
1,001	3,054	Sent to Rambha ...	1,001	3,054	...	...	
1,272	...	Do. ...	1,272	...	...	...	
1	14	Sent to Gayagonda ...	1	14	...	...	
868	13,075	Converted into sleepers.	868	13,075	...	...	
2,344	7,414	Sent to Russelcondah.	1,943	6,150	174	604	
		Do. Dongabhumi.	227	660			

Statement of Timber and other Produce cut and collected

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Ganjam—*cont.*	Rambha F.D.	Sál slabs	...	...	4,470	...
	Dongabhumi	Sál sleepers	...	...	227	660
	Buguda	Sál logs	...	...	508	4,361
		Do sleepers	...	...	94	181
	Kriyamba	Sál slabs	...	...	144	...
	Chokapad	Sál logs	1,660	26,201	1,977	11,691
	Rambha	Sál sleepers	...	...	2,206	3,230
		Miscellaneous planks	...	...	310	...
	Darpangia and Gullery.	Sál demarcation posts	1,158	1,032	60	20
		Do. do. boards	...	...	70	...
		Do. slabs	...	...	3,695	...
		Piasál logs	...	...	8	113
		Miscellaneous logs	16	64	11	125
	Baibali and Teleki	Sál logs	...	...	1,182	8,543
	Kaliamba	Sleepers	...	...	1,198	2,033
	Vinjagheri	Slabs	...	...	1,110	...
		Demarcation posts	...	...	458	321
		Sajo	...	...	7	113
	Hatiguda	Slabs	...	...	95	...
	Pipalapanka	Sál logs	1,472	17,619	7	111
	Dhougam	Sál sleepers	...	...	215	507
		Do. slabs	...	...	366	...
		Demarcation posts	...	...	1,000	770
		Sajo logs	22	411	12	205
		Satin wood logs	7	79	4	36
		Piasál logs	...	...	1	8
		Dhau do.	...	...	7	98
		Miscellaneous logs	4	36	28	294
	Berhampore	Sál logs	77	663	...	...
		Do. sleepers	4	12	...	...
		Miscellaneous logs	3	30	...	...
		Total timber	8,052	50,768	43,488	155,784
	Gundribadi and Gogodo.	Firewood	Tons 30	2,100	...	...
	Darpangia and Gullery.	Firewood	..	...	Tons 1	70
		Charcoal	..	...	„ 2½	900
	Vinjagheri	Firewood	Tons 200	14,000	„ 1,598	111,958
	Dhougam	Firewood	„ 66½	4,655	„ 147½	10,343
		Total fuel	Tons 296½	20,755	Tons 1,749	123,271
	Gundribadi and Gogodo.	Bamboos	...	...	8,440	...
	Gayagonda F.D.	Bamboos	...	...	600	...
	Tilsingi F.D	Do.	...	...	350	...
	Dongabhumi F.D.	Do.	...	...	10,680	...
	Paichalia	Do.	...	...	3,680	...
	Darpangia and Gullery.	Do.	...	...	500	...
		Total bamboos	...	...	23,650	...

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
4,470	...	Sold	107	...	4,279	...	
		Sent to Tilsingi ...	84	...			
227	660	Sent to Russelcondah.	227	660	...	...	
508	4,361	Converted into sleepers.	94	726	414	3,635	
94	181	... ...	...	...	94	181	
144	...	... ...	...	...	144	...	
		Written off stock ...	1,447*	21,623			* Bd's. Pro. F. No. 481 of 10th Sept. 1888.
		Sent to Gopalpur ...	78	1,091			
3,637	37,892	Do. Russelcondah.	333	2,395	633	7,146	
		Converted into sleepers.	1,142	5,604			
		Used departmentally.	4	33			
2,206	3,230	Sent to Russelcondah.	2,035	2,974	171	256	
310	...	.....	...	...	310	...	
		Sent to Bodoborosinghi range.	458	321			
1,518	1,112	Sent to Pondokol ...	1,000	770	60	21	
70	...	... ...	...	...	70	...	
		Converted into demarcation boards.	50	...			
3,695	...	Converted into demarcation posts.	60	...	3,585	...	
8	113	Used departmentally.	3	53	5	60	
27	189	.....	...	...	27	189	
		Converted into sleepers.	911	6,478			
1,182	8,543	Sent to Russelcondah.	28	162	243	1,903	
1,198	2,033	Do.	1,025	1,742	173	291	
1,110		Sent to Hatigada ...	95	...	1,015		
458	321	.....	...	...	458	321	
7	113	Sent to Russelcondah.	4	52	3	61	
95	...	.....	...	...	95	...	
		Sent to Gopalpur ...	75	213			
		Do. Surada ...	246	991			
1,479	17,730	Converted into sleepers.	198	786	718	14,530	
		Burnt	242	1,210			
215	507	Sent to Surada ...	200	485	15	22	
396	...	...	...	...	396	...	
1,000	770	Used departmentally.	1,000	770	...	...	
34	616	Sent to Surada ...	7	86	27	530	
11	115	Do. ...	9	99	2	16	
1	8	.....	...	...	1	8	
7	98	.....	...	...	7	98	
32	330	Sent to Surada ...	2	16	30	314	
77	663	Sent to Berhampore...	23	225	10	...	
		Do. Gopalpur ...	44	438			
4	12	Stolen	4	12	...	...	
3	30	Stolen	1	11	...	...	
		Sent to Berhampore...	2	19			
51,540	206,552		34,080	167,856	17,460	38,696	
Tons 30	2,100	.....	...	...	Tons 30	2,100	
„ 1	70	Sold	1	70	...	...	
„ 2½	900	.....	...	...	2½	900	
1,798	126,958	Sold	60	4,208	„ 1,735½	120,875	
		Sent to Berhampore.	12½	875			
214½	14,098	Sold	130½	9,067	84	5,931	
Tons 2,045½	144,026		Tons 203½	14,220	1,841½	129,806	
		Used departmentally.	1,000				
		Sent to Tilsingi „	350				
8,440	...	Do. Gayagonda ...	600	...	...	...	
		Do. Dongabhumi.	6,400				
600	...	Used departmentally.	600	...	...	...	
350	...	Do. ...	350	...	...	...	
10,080	...	.....	...	...	10,080	...	
[3,680	...	Sent to Dongabhumi.	3,680	...		...	
500	...	.....	...	...	500	...	
23,650	...		13,070	...	10,580	...	

Statement of Timber and other Produce cut and collected

District.	Forest range, Forest or working circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Ganjam—*cont.*	Kriyamba ...	Mangoes	...	...	...	Md. 1
	Dhougam ...	Moholo flowers	...	...	...	Mds. 40
		Total minor produce ...	...	...	...	Mds. 41
Vizagapatam.	Palkonda ...	Sál rafters	...	...	29	43½
		Nallamaddi logs ...	...	...	8	84
		Miscellaneous rafters ...	...	...	11	16½
		Total timber ...	...	...	48	144
Godávari ...	Rékapalli ...	Konda Tangadu logs ...	86	931	Tons 156	1,042
		Nallamaddi „ ...	40	422	123	1,321
		Chiriman „ ...	13	176	31	381
		Miscellaneous „ ...	5	57	40	469
		Total timber ...	144	1,586	350	4,113
		Firewood	...	1,296	...	756
		Total fuel ...	...	1,296	...	756
Kistna ...	Bezváda	Thuníma poles	105	105	82	82
	Guntúr	Do.	...	...	123	20
	Bezváda	Thorns	...	...	Faggots 72	360
	Palnad	Do.	...	...	„ 560	2,800
		Total timber ...	105	105	837	3,262
	Bezváda ...	Firewood	...	...	...	20
	Krósúr	Do.	...	...	...	9,320
	Guntúr	Do.	...	...	...	200
	Bápatla	Do.	...	...	...	10
	Palnád	Do.	...	...	...	500
		Total fuel ...	...	...	...	10,050
Nellore ...	Stríharikóta ...	Pegs	...	...	14,500	7,250
		Stakes	...	...	9,400	9,400
		Poles	...	...	8	16
	Stríharikóta ...	Firewood. Chinna Mottalu ...	No. 75	25	840	280
		Firewood. Matchalu	„ 53,995	5,400	834,680	83,468
		Firewood. Rasi	„ 29,540	1,738	535,925	31,525
		Firewood. Sannam	„ 139,120	1,391	794,430	7,944
		Firewood. Thopudu	„ 23,330	467	19,200	384
		Firewood. Sulli bundles	„ 53,697	71,596	51,063	68,084
	Kávali	Firewood	...	...	Cart loads 5	100
	Dugarazpatam ...	Casuarina wood ...	Tons 4,708	188,320	Tons 721	28,840
		Total fuel ...	...	268,937	...	237,291
	Stríharikóta ...	Rattans	...	...	Bds. 103	Mds. 309
		Cheyroot	...	Mds. 756	...	„ 140
		Sarsaparilla	...	„ 219	...	„ 178
		Nux vomica	...	...	...	„ 787
		Orchella	...	Mds. 7	...	„ 1
		Soapnuts	...	...	...	„ 1,070
		Iswara	...	Mds. 27	...	...
		Vishabuddy	...	„ 8	...	...
		Kukkapala	...	„ 9	...	...
		Tangedu	...	„ 63	...	...
		Honey	...	...	...	13
		Total minor produce ...	...	Mds. 1,089	Bds. 103	2,498
Cuddapah ...	Kódúr ...	Red sanders, roots and stumps.	...	...	Tons. 1,920	92,160
		Red sanders, poles ...	No. 164	164	No. 81	81
		Teak	3	3	...	...

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
...	Mds. 1	Sold	...	Mds. 1	...	...	
...	„ 40	Do.	...	„ 40	...	...	
	Mds. 41		...	Mds. 41	...	...	
29	43½	Sent to Rajam ...	29	43½	...	...	
8	84	Do. ...	8	84	...	...	
11	16½	Do. ...	11	16½	...	...	
48	144		48	144	...	..	
242	2,878	.....	...	...	242	2,878	
163	1,743	.....	...	...	163	1,743	
44	557	.....	...	...	44	557	
45	526	.....	...	...	45	526	
494	5,699		...	...	494	5,699	
...	2,052	Sold to Public Works Department.	...	486	...	1,566	
...	2,052		..	486	...	1,566	
187	187	Lost	25	25	...	...	As fence to Rezvâda reserved forests.
		Sold	81	81			
		Used departmentally	81	81			
123	20	Sold	123	20	...	...	
Faggots 72	360	Do.	Faggots 72	360	...	...	
„ 560	2,800	Do.	„ 560	2,800	...	...	
942	3,367		942	3,367	...	...	
..	20	Sold	...	20	...	...	
...	9,320	Do.	...	9,320	...	...	
...	200	Do.	...	140	...	60	
...	10	Do.	...	10	...	...	
..	500	Do.	..	500	...	...	
...	10,050		...	9,990	...	60	
14,500	7,250	Supplied to Salt Department	14,500	7,250	...	...	½ cubic foot each estimate.
9,400	9,400		9,400	9,400	...	...	1 cubic foot each estimate.
8	16	Sent to depôt ...	8	16	...	...	
915	305	Sent to Madras depôt.	915	305	..	...	
888,675	88,868	Do. ...	542,255	54,226	346,420	34,642	
565,465	33,263	Do. ...	535,150	31,480	30,315	1,783	
933,550	9,335	Do. ...	797,975	7,980	135,575	1,355	
42,530	851	Do. ...	19,665	394	22,865	457	
104,760	139,680	Do. ...	78,201	104,268	26,559	35,412	
Cart lds. 5	100	Sold	Cart lds. 5	100	...	...	
Tons 5,429	217,160	Sent to Madras depôt.	Tons 607	190,240	Tons 673	26,920	
		Sold	„ 4,012				
		Wastage	„ 137				
...	506,228		...	405,659	...	100,569	
Bds. 103	Mds. 309	Sent to Madras depôt	Bds. 103	Mds. 309	...	...	Estimate 1 bundle = 3 maunds = 1,000 rattans.
...	„ 896	Sold	...	„ 696	...	Mds. 200	
...	„ 397	Sent to Madras depôt	...	„ 219	...	„ 178	
...	„ 787	Do. ...	...	...	...	„ 787	
...	„ 8	Sold	...	Mds. 8	...	...	
...	„ 1,070	Do.	...	„ 1,070	...	...	
...	„ 27	... ..	...	..	...	Mds. 27	
...	„ 8	.....	...	...	...	„ 8	
...	„ 9	.....	...	...	...	9	
...	„ 63	.....	...	...	...	„ 63	
...	„ 13	.....	...	...	...	„ 13	
Bds. 103	Mds. 3,587		Bds. 103	Mds. 2,302	...	Mds. 1,285	
Tons 1,920	92,160	Taken to depôt ...	Tons 1,900	91,200	Tons 20	960	
No. 245	245	Sold	No. 90	90	No. 29	29	
		Used departmentally.	„ 103	103			
		Destroyed by white-ants.	„ 23	23			
„ 3	3	Sold	„ 3	3	...	...	

Statement of Timber and other Produce cut and collected

District.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Cuddapah —*cont.*	Kodúr—*cont.* ...	Miscellaneous	No. 135	875	No. 118	118
	Rajampôt ...	Red sanders posts ...	„ 350	350	...	...
		Yellama	„ 280	280	...	...
	Badvél ...	Teak logs	...	...	No. 2	15
	Ráyachóti ...	Red sanders	No. 100	100	„ 2,829	2,829
		Teak	...	...	„ 8	8
		Miscellaneous	...	...	„ 1,073	1,078
	Váyalpád ...	Thumba slabs	No. 2,030	2,030	„ 828	833
	Cuddapah ...	Palmyra trees	...	...	„ 12	24
		Yellama	...	...	„ 8	400
		Total, Timber ...	No. 3,062	3,302	...	97,546
	Kódúr	Firewood	Tons 85	4,760	Tons 60	3,360
	Badvél ...	Do.	„ 91¼	5,110	„ 157½	8,820
	Ráyachóti ...	Do.	...	...	„ 25	1,400
	Cuddapah ...	Do.	...	...	„ 3½	196
		Total, Fuel ...	Tons 176¼	9,870	Tons 246	13,776
	Kódúr ...	Bamboos	...	No. 300	3,711 Carts 100	No. 6,711
	Ráyachóti ...	Do.	...	...	...	„ 750
		Total, Bamboos ...		No. 300	...	No. 7,461
	Sidhout ...	Gallnuts	...	...	...	Mds. 350
	Cuddapah ...	Do.	...	Mds. 96	...	„ 197
	Ráyachóti ...	Do.	...	..	...	„ 871
	Badvél ...	Honey	...	...	Bottles 12	„ 1
		Wax	...	...	lb. 1	„
	Madanapalle ..	Coffee	...	...	...	„ 2½
		Rathipuvu	...	...	...	„ 31
		Jack fruits	...	...	No. 16	„ 8
		Mangoes	...	...	„ 1,300	„ 17½
		Pears	...	...	„ 120	„ 1½
		Pomegranates	...	...	„ 76	„ 1
		Pumelos	...	...	„ 1,466	„ 91½
		Oranges	...	...	„ 7,646	„ 102
		Total, Minor Produce ...	...	Mds. 96	...	Mds. 1,173½
Kurnool ...	Nandyál ...	Logs	...	...	...	51
			...	...	Cart-loads 72	1,440
		Felloes	...	...	447	87
		Spokes	...	...	903	113
	Nandikótkur ...	Miscellaneous poles ...	...	...	64	640
		Total, Timber ...	...	...	...	3,281
	Ramallakóta ...	Firewood	...	...	Cart-loads 13	260
	Nandyál ..	Do.	...	...	...	979
		Total, Fuel ...	...	...	Cart-loads 13	1,239

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
No. 253	493	Sold Used departmentally. Do. Destroyed and loss on remeasurement.	No. 151 „ 99 ... No. 3	151 99 180 63	...	...	60 cubic feet loss.
„ 350	350	Sold	„ 350	350	...	...	
„ 280	280	Do.	„ 280	280	...	...	
„ 2	15	Taken to Cuddapah depôt.	„ 2	15	...	...	
„ 2,929	2,929	Sold Used departmentally.	„ 100 „ 84	100 84	No. 2,745	2,745	
„ 8	8	Do.	„ 3	3	„ 5	5	
„ 1,073	1,078	Do.	„ 71	71	„ 1,002	1,007	
„ 2,858	2,863	Sent to Cuddapah depôt. Sold	„ 50 „ 48	50 48	„ 2,760	2,765	
„ 12	24	...	„ 12	24	...	...	
„ 8	400	Do.	„ 8	400	..	...	
...	100,848	...	...	93,337	...	7,511	
Tons 145	8,120	Used departmentally. Sold	Tons 144 „ 1	8,064 56	...	...	
„ 248¾	13,930	Do.	„ 203½	11,396	45½	2,534	
„ 25	1,400	...	...	..	25	1,400	
„ 3½	196	Taken to depôt ...	Tons 3½	196	...	...	
Tons 422¼	23,646	...	Tons 352	19,712	70½	3,934	
4,011 Carts 100	No. 7,011	Used departmentally.	...	300	3,711 Carts 100	No. 6,711	
...	„ 750	Do. ...	...	No. 250	..	„ 500	
...	No. 7,761	...	...	550	...	No. 7,211	
...	Mds. 350	Taken to Votimetta depôt.	...	Mds. 133	...	Mds. 200	
..	„ 293	Dryage ... .. Taken to Mamillapalle depôt.	... ..	„ 17 „ 293	...	...	
...	„ 371	Taken to Pulisettivandlapalle depôt. Taken to Kurapalle depôt.	... ...	„ 233 „ 138	..	...	
Bottles 12	1	Taken to Cuddapah depôt.	Bottles 12	„ 1	...	...	
lb. 1	...	Do. ...	lb. 1	...	...	...	
..	„ 2½	Sold	...	„ 2½	...	...	
..	„ 31	Taken to Cuddapah depôt.	...	„ 31	...	...	
No. 16	„ 8	Sold	No. 16	„ 8	...	...	Each ½ maund estimate.
„ 1,300	„ 17½	Do.	„ 1,300	„ 17½	...	...	75 fruits per maund estimate.
„ 120	„ 1½	Do.	„ 120	„ 1½	...	...	
„ 76	„ 1	Do.	„ 76	„ 1	...	...	
„ 1,466	„ 91½	Do.	„ 1,466	„ 91½	...	...	16 do.
„ 7,646	„ 102	Sold ... ... Taken to Cuddapah depôt.	„ 5,142 „ 2,504	„ 68⅔ „ 33½	...	...	75 do.
...	Maunds 1,269¼	...	...	Mds. 1,069¾	...	Mds. 200	
..	51	...	...	...	...	51	
Cart-lds. 72	1,440	...	...	...	Cart-lds. 72	1,440	1 cart-load=20 cubic feet.
447	37	Sold	447	37	...	...	
903	113	Do.	903	113	...	...	
64	640	Do.	64	640	...	.	
...	2,281	...	1,414	790	Cart-lds. 72	1,491	
Cart-lds. 13	260	Supplied to Kurnool Jail.	Cart-lds. 13	260	...	...	
...	979	...	...	...	...	979	
Cart-lds. 13	1,239	...	Cart-lds. 13	260	...	979	

Statement of Timber and other Produce cut and collected

District.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Kurnool—*cont.*	Nandikótkur	Gallnuts	...	Mds. 280	...	...
		Yellama gum	...	...	...	Mds. 12½
	Nandyál	Gallnuts	...	...	...	„ 26½
		Honey	...	...	...	„ 5
	Sirvél	Gallnuts	...	Mds. 190	...	„ 156
		Honey	...	...	...	„ 4
		Wax	...	...	...	„ 10
		Tamarind	...	...	...	„ 108
	Cumbum	Gallnuts	...	...	...	„ 21½
		Marking nuts	...	...	...	„ ½
		Tamarind	...	...	...	„ 116½
		Grass	...	...	Cart-loads 10	„ 450
	Márkapúr	Soapnuts	...	...	...	„ 5½
	Pattikonda	Tamarind	...	...	...	„ 58
		Total, Minor Produce	...	Mds. 470	...	Mds. 969½
	Sandúr	Teak poles	...	...	400	1,200
		Rafters	...	...	1,636	3,272
		Total, Timber	...	...	2,036	4,472
Bellary	Sandúr	Railway fuel	Tons 671	46,299	Tons 1,288¾	88,924
		Creeper fuel	...	...	„ 33	2,277
	Adóni	Deadwood	...	...	1 dead tree and 32 stumps.	64
		Total, Fuel	Tons 671	46,299	1,321¾	91,265
	Sandúr	Bamboos	...	...	58,187	...
		Total, Bamboos	...	...	58,187	...
	Sandúr	Kapila dye	lb. 5	...	...	...
		Tamarind	...	Mds. 43	...	...
		Honey	...	...	...	Mds. 9
		Wax	...	...	...	„ 2
		Total, Minor Produce	lb. 5	Mds. 43	...	Mds. 11
	Muchukóta	Yepi pieces	...	...	1,575	1,575
	Penukonda	Teak rafters	150	75	...	...
	Hindupur	Timber	Cart-lds. 10	200	...	...
		Total, Timber	...	275	1,575	1,575
	Penukonda	Brushwood	...	...	Cart-loads 8	160
	Muchukóta	Do.	...	...	„ 14	280
		Total, Fuel	...	...	Cart-loads 22	440
Anantapur.	Penukonda	Gallnuts	...	...	...	Mds. 86½
		Yellama gum	...	...	...	„ 52½
		Yepi fibre	...	...	...	„ 2
		Honey	...	...	...	„ 94½
		Wax	...	...	...	„ 5
		Yellama gum	...	Mds. 8¼	...	„ 14¼
		Tamarind	...	...	...	„ 9
		Kanuga seeds	...	...	Tooms 12½ or	„ 20
	Hindupúr	Sara nuts	...	...	Moas. 54	„ 4½
		Honey	...	...	...	„ 86

by Government Agency during the year 1888-89—*cont.*

TOTAL.		DISPOSED OF DURING YEAR.			BALANCE AT END OF YEAR.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
...	Mds. 280	Written off ...	...	280	...	...	
...	„ 12½	Sold	...	10½	...	...	
		Wastage	...	1½			
...	„ 26½	...	...	...	...	26½	
...	„ 5	Sold	...	5	...	...	
...	„ 346	Written off ...	...	190	...	156	
...	„ 4	...	...	...	...	4	
...	„ 10	...	...	...	...	10	
...	„ 103	...	...	...	...	103	
...	„ 21½	Sold	...	21½	...	...	
...	„ ½	Do.	...	½	...	...	
...	„ 116¾	Do.	...	116¾	...	...	
Cart-lds. 10	„ 450	...	...	...	Cart-lds. 10	450	
...	„ 5¾	Sold	...	5¾	...	...	
...	„ 58	...	...	6	...	52	
...	Maunds 1,439½	...	...	638	...	801½	
400	1,200	Sold	400	1,200	...	...	
1,636	3,272	Do.	1,636	3,272	...	...	
2,036	4,472	...	2,036	4,472	...	...	
Tons 1,959¾	135,223	Sold	Tons 1,273	87,837	582½	40,176	1 ton=69 cubic feet by railway specification.
		Sent to Hospet depôt.	„ 84	5,796			
		Sold by auction ...	„ 20½	1,414			
„ 33	2,277	Sent to Bellary ...	„ 9½	655	23½	1,622	
1 dead tree and 32 stumps.	64	Sold	1 dead tree and 32 stumps.	64	...	...	
1,992¾	137,564	...	Tons 1,387	95,766	605¾	41,798	
58,187	...	Sold	58,187	...	...	...	
58,187	...	...	58,187	...	...	...	
lbs. 5	...	Sold	lbs. 5	...	...	...	
...	Mds. 43	Do.	...	Mds. 43	...	...	
...	„ 9	Do.	...	„ 9	...	...	
...	„ 2	Do.	...	„ 2	...	...	
lbs. 5	Mds. 54	..	lbs. 5	Mds. 54	...	...	
1,575	1,575	Sold	1,575	1,575	...	...	
150	75	...	...	...	150	75	2=1 cubic foot.
Cart-lds. 10	200	...	...	...	Cart-lds. 10	200	
...	2,850	...	1,575	1,575	...	275	
Cart-lds. 8	160	...	...	...	Cart-lds. 8	160	
„ 14	280	Sold	Cart-lds. 4	80	„ 10	200	
Cart-lds. 22	440	...	Cart-lds. 4	80	Cart-lds. 18	360	
...	Mds. 86½	Taken to Bukkapatnam depôt.	...	Mds. 86½	...	...	
...	„ 52½	Do. do. ...	...	„ 52½	...	...	
...	„ 2	Do. do. ..	...	„ 2	...	...	
...	„ 94½	Do. do. ...	...	„ 94½	...	...	
...	„ 5	Do. do. ...	...	„ 5	...	...	
...	„ 23	Sold	...	„ 23	...	...	
...	„ 9	Do.	...	„ 9	...	...	
Tooms 12½ or	„ 20	Do.	Tooms 12½ or	„ 20	...	...	1 toom=¾ measures.
		Do.	Meas. 45				
Meas. 54	„ 4½	Sent to Bukkapatnam depôt.	„ 7½	„ 4½	...	...	
		Wastage	„ 1¼				
		Sold	...	„ ¼			
...	„ 36	Sent to Bukkapatnam depôt.	...	„ 35½	...	...	
		Wastage	...	„ ¼			

Statement of Timber and other Produce cut and collected

District.	Forest range, Forest or Working Circle.	Description of Timber or Forest produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Anantapur	Hindupur ...	Wax	...	...	...	Mds. 2
	Anantapur ...	Honey	...	...	...	„ ½
	Muchukota ...	Yepi fibre	...	...	...	„ 50
		Total minor produce ...	...	Mds. 8½	...	Mds. 377
Nilgiris ...	Benne reserved forest.	Teak logs	26	1,000	444	11,263
		Blackwood logs ...	3	230	59	2,066
		Drag poles	...	...	7	7
		Vengai logs	11	448	142	4,640
					Increase on remeasurement.	101
		Mutti do.	10	506	152	5,941
	Mudumalai leased forest.	Teak logs ...	75	1,721	...	...
		Do. poles	2,317	13,902	591	591
		Do. pieces	...	1,205	...	...
		Blackwood logs and poles	207	1,719	9	130
		Vengai logs ...	176	1,056	74	110
		Mutti do. ...	101	764	...	...
		Junglewood do. ...	205	1,298	...	...
	Coonoor Working Circle.	Drag poles	...	...	2,184	2,184
	Bleak House Working Circle.	Slabs	...	...	Lds. 3½	100
		Acacia planks	...	...	3	3
		Do. rafters ...	...	...	260	130
		Drag poles	260	260	680	680
	Bandy shola Working Circle.	Acacia planks	...	...	59	59
		Do. rafters	...	...	272	136
	Longwood forest depôt.	Drag poles	8	8	309	309
		Planks	...	...	1	1
		Rafters	...	...	77	38½
	Barliyur Working Circle.	Drag poles	287	287	...	...
	Kotagiri	Do.	...	...	222	222
		Total Timber ...	3,686	24,404	5,545	28,711½
	Aramby Working Circle.	Eucalyptus firewood ...	Tons 1,170	74,900	Lots 636½	63,650
		Do. do. ...	...	...	Hd. lds. 3,069	3,069
		Do. leaves ...	...	...	„ 838	838
	Cairn Hill Working Circle.	Do. firewood ...	...	...	Lots 468½	46,850
		Do. do. ...	...	...	Hd. lds. 3,939	3,939
		Do. leaves ...	...	...	„ 80	80
		Creepers	...	...	„ 284	284
	Governor's shola Working Circle.	Eucalyptus firewood ...	Tons 950	60,800	Lots 40	4,000
		Do. do. ...	...	...	Hd. lds. 2,801	2,801
	Snowdon forest ...	Acacia do. ...	...	...	Lots 3	300
	Lovedale forest ...	Sholawood do. ...	...	...	„ 2	200
	Coonoor Peak Working Circle.	Eucalyptus firewood ...	Tons 2,612	167,100	Lots 1,469½	146,925
		Do. do. ...	...	...	Bull. lds. 333	1,332
		Do. do. ...	...	...	Hd. lds. 9,450	9,450
	Bandy shola Working Circle.	Acacia firewood ...	Tons 14	900	Lots 185	18,500
		Do. do.	...	...	Bull. lds. 585	2,340
		Do. do.	...	...	Hd. lds. 1,195	1,195
		Do. leaves ...	...	...	Cart loads 2	40

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
...	Mds. 2	Sold	...	Mds. 1½	...	...	
		Sent to Bukkapatnam depôt.	...	„ ½			
		Dryage	...	„ ½			
...	„ ½	.....	...	...	...	½	
...	„ 50	Sold	...	„ 50	...	...	
...	Mds. 385½		...	Mds. 385	...	½	
470	12,263	Sold	401	10,594	69	1,669	
62	2,296	Sold	12	676	50	1,178	
		Loss on remeasurement.	...	442			
7	7	Sold	7	7	...	...	
153	5,189	Sold	152	5,158	1	31	
162	6,447	Sold	24	888	137	5,532	
		Used departmentally..	1	27			
75	1,721	Sold	75	1,721	...	...	
2,908	14,493	Do.	1,658	7,792	1,250	6,701	
...	1,205	Written off	...	1,205	...	...	
216	1,849	Sold	15	122	201	1,727	
250	1,166	Do.	86	150	164	1,016	
101	764	.....	...	...	101	764	
205	1,298	Sold	194	1,200	11	98	
2,184	2,184	Sent to Coonoor depôt	1,930	1,930	32	32	
		Sent to Kotagiri ...	222	222			
Lds. 3½	100	Sold	Lds. 3½	100	...	...	
3	3	Sent to Coonoor depôt	3	3	...	...	
260	130	Do. ...	260	130	...	..	
940	940	Do. ...	940	940	...	...	
59	59	Do. ...	59	59	...	...	
272	136	Do. ...	272	136	...	...	
317	317	Sold	235	235	82	82	
1	1	Do.	1	1	...	...	
77	38½	Do.	34	17	43	21½	
287	287	.....	...	...	287	287	
222	222	.....	...	...	222	222	
9,231	53,115½		6,581	33,755	2,650	19,360½	
Lots 1,385½	138,550	Sold	Lots 486	48,600	Lots 515½	51,550	
		Sent to Ooty depôt ...	„ 268½	26,850			
		Dryage	„ 115½	11,550			
H.lds. 3,069	3,069	Sold	H.lds. 3,069	3,069	...	...	
„ 838	838	Do.	„ 838	838	...	...	
Lots 468½	46,850	Do.	Lots. 109½	10,975	245½	24,575	
		Sent to Ooty depôt ...	„ 113	11 300			
H.lds. 3,939	3,939	Sold	H. L. 3,939	3,939	...	...	
„ 80	80	Do.	„ 80	80	...	...	
„ 284	284	Do.	„ 284	284	...	...	
		Do.	Lots 200	20,000			
Lots 648	64,800	Sent to Ooty depôt ...	„ 131½	13,150	208½	20,850	
		Dryage	„ 108	10,800			
H.lds. 2,801	2,801	Sold	H.lds. 2,801	2,801	...	...	
Lots 3	300	Do.	Lots 3	300	...	...	
„ 2	200	Do.	„ 2	200	...	...	
„ 3,140½	314,025	Sold	„ 68¼	6,875	2,266	226,600	
		Dryage	„ 75	7,500			
		Converted charcoal	„ 5	500			
		Sent to Coonoor depôt	„ 168½	16,850			
		Do. Wellington do.	„ 557	55,700			
B. lds. 333	1,332	Sold	B. lds. 333	1,332	...	...	
H.lds. 9,450	9,450	Do.	H.lds. 9,450	9,450	...	...	
Lots 194	19,400	Sold	Lots 7	700	80	8,000	
		Converted charcoal ...	„ 98½	9,825			
		Sent Wellington depot	„ 1¼	175			
		Dryage	„ 7	700			
B. lds. 585	2,340	Sold	B. lds. 585	2,340	...	...	
H.lds. 1,195	1,195	Do.	H.lds. 1,195	1,195	...	...	
Cart lds. 2	40	Do.	Cart lds. 2	40	...	...	

Statement of Timber and other Produce cut and collected

District.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Nilgiris—*cont.*	Banjy Shola W. C.—*cont.*	Charcoal	Ton 1	330	Bags 1,204	10,750
	Bleak House W. C.	Acacia firewood ...	Tons 105	6,700	Lots 47½	4,750
		Do. do. ...	...	...	Bull. lds. 110	440
		Do. do. ...	...	...	Hd. lds. 6,662	6,662
		Do. slabs ...	...	...	Cart loads 3	60
	Sim's Park forest	Shola firewood ...	...	...	...	70
		Do. do. ...	...	...	Head loads 8	8
	Ghát reserved forest.	Do. do. ...	Ton 1	75	Lot 1	100
	Town shola forest.	Do. do. ...	...	...	Hd. lds. 184	184
	Rallia W. C. ...	Eucalyptus firewood ...	...	...	Lots 333½	33,350
		Do. do. ...	...	...	Bull. lds. 17	68
		Do. do. ...	...	...	Hd. lds. 1,480	1,480
	Longwood forest.	Shola do. ...	Tons 50½	3,200	Lots 18	1,800
	Kotagiri forest depôt.	Charcoal	lbs. 940	165	Bags 40	357
	Burliyar Working Circle.	Shola firewood ...	Tons. 555	35,700	Lots 239	23,900
	Devashola Forest.	Do. do.	...	...	6	600
		Total ...	...	349,870	...	390,372
	Sigur	Sandalwood	...	Mds. 233	...	Mds. 1,714
		Total, Sandalwood ...	...	Mds. 233	...	Mds. 1,714
	Ootacamund ...	Gallnuts	...	...	...	Mds. 544
	Coonoor	Gallnuts	...	...	...	„ 162
		Dammer.	...	...	...	„ 3½
		Honey	...	...	...	„ 17½
		Wax	...	...	...	½
	Kótagiri... ...	Gallnuts	...	...	...	757½
		Sheakoy	...	...	...	16½
		Tamarind	...	...	...	9½
		Honey	...	...	...	Seers 3
		Wax	...	...	...	Md. ½
		Horns	...	...	...	Mds. 7½
	Kullar	Sheakoy	...	...	...	45
		Tamarind	...	...	...	10
		Wax	...	...	...	½
	Melúr	Gallnuts	...	..	...	54½
		Vembadam bark ...	...	...	...	44½
		Horns	...	...	...	6
		Wax	...	...	...	½
	Sigur	Gallnuts	...	Mds. 235	...	215
		Vembadam bark ...	...	„ 80	...	20½
		Sheakoy	...	„ 90	...	3
		Tamarind	...	2½	...	...
		Honey	...	15	...	¼
		Wax	...	4	...	½
		Deer horns	...	3	...	7½

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of	Number.	Cubic feet.	Number.	Cubic feet.	
Bags 1,241	11,080	Sold	Bags 26	232	Bags 102	911	1 bag=50 lbs. =500lbs. firewood = $\frac{500}{55}$ cubic feet.
		Sent Ooty depôt ...	,, 637	5,687			
		Sent Wellington depôt	,, 434	3,875			
		Sent Kotagiri forest ..	,, 40	357			
		Wastage	,, 2	18			
Lots 114½	11,450	Sold	Lots 15	1,500	39	3,900	
		Converted charcoal ...	,, 16½	1,650			
		Sent Wellington depôt	,, 38½	3,850			
		Dryage	,, 5½	550			
B. lds. 110	440	Sold	B. lds. 110	440	...	...	
H.lds.6,662	6,662	Do.	H.lds.6,662	6,662	...	...	
Cart lds. 3	60	Do.	Cart lds. 3	60	...	...	
...	70	Sold	..	20	...	...	
		Sent Wellington depôt	...	25			
		Dryage	...	25			
Hd. lds. 8	8	Sold	Hd. lds. 8	8	...	...	
Lots 2	175	Sent Coonoor depôt ...	Lots 1	100	1	75	
Hd. lds. 184	184	Sold	Hd lds. 184	184	...	...	
Lots 333½	33,350	.....	...	...	333½	33,350	
B. lds. 17	68	Sold	B. lds. 17	68	...	...	
,, 1,480	1,480	Do.	H.lds.1,480	1,480	...	..	
Lots 50	5,000	Do.	Lots 4¼	425	45¾	4,575	
Bags 58½	522	Do.	Bags 35½	317	Bags 23	205	
Lots 596	59,600	Do.	Lots 15	1,500	Lots 370½	37,050	
		Dryage	,, 210½	21,050			
,, 6	600	... ..	...	...	6	600	
...	740,242	.....	...	328,001	...	412,241	
...	Mds. 1,947	Sold	...	Mds. 1,792	...	...	
		Dryage	...	,, 155			
...	Mds. 1,947	.....	...	Mds. 1,947	...	...	
...	Mds. 544	Sold	...	Mds. 500	...	Mds. 44	
...	,, 162	Do.	...	,, 36	...	,, 126	
...	,, 3¾	Do.	...	,, 3¾	...	...	
...	,, 17¼	Sold	...	12	...	Mds. 4¼	
		Wastage	...	1			
...	¼	.....	...	...	...	¼	
...	757½	Sold	...	757½	..	...	
...	16¾	Do.	...	16¾	...	...	
...	9¼	Do.	...	9¼	...	...	
...	Seers 3	Do.	...	Seers 3	...	...	
...	Md. ¼	Do.	...	Md. ¼	...	...	
...	Mds. 7½	Do.	...	Mds. 7½	...	...	
...	45	Do.	...	25	...	20	
...	10	... ..	...	...	...	10	
...	¾	Sold	...	¾	...	...	
...	54½	Sent to Coonoor depôt.	...	22	...	32½	
...	44½	.....	...	...	...	44½	
...	6	.....	...	...	...	6	
...	¼	.....	...	...	...	¼	
...	450	Sold	...	267½	...	175	
		Dryage	...	7½			
...	100¼	Wastage	...	9¾	...	90½	
...	5	Sold	...	4½	...	...	* Of last year's opening balance 88 mds. belong to Naduvatam.
		Wastage	...	¼	...	...	
...	2½	Sold	...	2½	...	...	
...	15¼	Do.	...	2	...	13	
		Wastage	...	¼			
...	4¼	Sold	...	1¼	...	¼	
		Spoiled	...	2¼			
...	10¼	Sold	...	7¾	...	2½	

Statement of Timber and other Produce cut and collected

District.	Forest Range, Forest or Working Circle.	Description of Timber or Forest Produce.	On hand at commencement of year.		Collected during year.	
			Number.	Cubic feet.	Number.	Cubic feet.
Nilgiri—*cont.*	Naduvatam ...	Gallnuts	...	...	...	90
		Sheakoy	...	Mds. 88	...	6
		Coffee	...	„ 4	...	2
		Wax	...	...	...	½
		Deer horns	...	...	...	1
	Mudumalai ...	Gallnuts	...	...	...	1,260
		Vembadam bark ...	...	...	...	30½
		Tamarind	...	...	...	135
		Honey	...	...	...	2½
		Wax	...	...	...	3
		Deer horns	...	...	...	9½
		Total, Minor Produce ...	...	433½	...	3,466½

by Government Agency during the year 1888-89—*cont.*

Total.		Disposed of during year.			Balance at end of year.		Remarks.
Number.	Cubic feet.	How disposed of.	Number.	Cubic feet.	Number.	Cubic feet.	
...	90	.....	...	...	...	90	
...	94	Sold	...	94	...	...	
...	6	.....	...	...	...	6	
...	¼	.....	...	...	...	¼	
...	1	.....	...	...	...	1	
...	1,260	Sold	...	1,260	...	...	
...	30¼	Do.	...	25¼	...	...	
		Wastage	...	5			
...	135	Sold	...	110	...	...	
		Wastage	...	25			
...	2¼	Sold	...	1¾	...	¼	
		Wastage	...	½			
...	3	Sold	...	2¾	...	...	
		Dryage	...	¼			
...	9¾	Sold	...	9¾	...	...	
...	8,900	.....	...	3,232¾	...	667¼	

ANNUAL FORM No. 70.

Forest Department, Madras, Northern Circle.

Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1888-89.

District.	Name of Depot.	Description of Timber and other Produce.	On hand, 1st April 1888.		Received during the year.			Total.		Disposed of during the year.			Balance on 31st March 1889.	
			Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Ganjam.	Russellkonda.	Sal logs	..	...	Chokapad	333	2,395	365	2,615	Sent to Gopalpur depot.	39	610	81	450
					Bodaborosingi.	28	162			Sold	185	633		
					Surada depot.	3	45			Cut into sleepers and scantlings.	50	892		
					Jaganathprasad.	1	13			Used departmentally.	10	30		
		Sleepers ...	...	...	Cut	138	230	9,721	23,290	Sent to Gopalpur depot.	8,733	21,483	820	1,520
					Chokapad ...	2,035	2,974			Sold	9	20		
					Bodaborosingi.	1,025	1,742			Used departmentally.	159	267		
					Gayagonda ...	4,353	11,534							
					Jaganathprasad.	2,170	6,810							
		Scantlings.	...	...	Cut	196	280	196	280	Sent to Gopapur depot.	128	170	60	80
										Used departmentally.	8	10		
		Slabs	...	...	Do.	5,390	...	5,390	...	Sold	299			
										Cut into scantlings.	1	...	5,069	...
										Used departmentally.	21			
		Blocks	...	...	Found ...	19	52	19	52	Sold	19	52	...	...
		Sajo logs ...	...	...	Do. ...	10	29	14	81	...	...	...	14	81
					Bodaborosingi.	4	52							
		Blackwood.	...	...	Gayagonda ...	2	26	2	26	Loss on remeasurement.	...	1	2	25
		Miscellaneous.	...	...	Found ...	15	25	15	25	...	...	...	15	25
	Surada.	Sal logs ...	16	218	Pondakhol ...	246	991	262	1,209	Sent to Gopalpur depot.	22	312	...	...
										Russellkonda	3	45		
										Cut into sleepers.	237	852		
		Sleepers ...	...	...	Cut	276	690	477	1,177	Sent to Gopalpur depot.	256	598	217	573
					Found ..	1	2			Used departmentally.	4	6		
					Pondakhol ...	200	485							
		Slabs	...	...	Cut	1,106	...	1,106	...	Used departmentally.	200	...	906	...
		Sajo logs	36	688	Pondakhol ...	7	86	43	774	Sent to Gopalpur.	37	625	6	137
										Loss on remeasurement.	...	22		
		Satinwood ..	3	33	Do. ...	9	99	12	132	Used departmentally.	8	95	4	18
										Loss on remeasurement.	...	19		
		Miscellaneous.	7	71	Do. ...	2	16	9	87	Sent to Khariguda.	2	16	7	71
	Khariguda.	Do. planks.	51	26	Found ...	40	20	91	46	Do. ...	64	32	27	14
		Do. logs ...	...	...	Surada depot.	2	16	2	16	Used departmentally.	2	16	...	...
		Do. planks.	123	61	Do. ...	64	32	187	93	Do. ...	187	93	...	...
	Bedigula.	Holondo planks.	317	...	...	...	...	317	...	Destroyed ...	7			
										Sent to Rambha.	310	...	...	...
	Berhampore.	Sal logs ...	...	...	Berhampore.	23	225	23	225	Sent to Gopalpur.	16	157	7	68
		Do. rafters.	...	...	Gopalpur depot.	16	23	16	23	Sold	16	23	...	...
		Piasal logs...	...	...	Berhampore.	2	19	2	19	Do.	2	19	...	...
					Gayagonda ...	4	71			Do.	43	352		
					Chokapad ...	78	1,091			Cut into sleepers and scantlings.	336	3,379		
					Pondakhol ..	75	213							
					Berhampore.	44	498			Used departmentally.	60	300	370	2,769
		Sal logs ...	648	4,625	Russellkonda depot.	39	610	930	7,530					
					Surada depot.	22	312			Cut into firewood.	121	739		
					Berhampore.	16	157							
					Found ...	4	13							
					Cut ...	556	1,505			Sold	2,528	8,688		
					Russellkonda depot.	8,733	21,483			Cut into scantlings.	1	2		
		Sleepers ...	150	369	Surada depot.	256	598	9,695	23,855	Do. firewood.	17	48	7,140	14,703
										Loss on remeasurement.	...	214		

Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1888-89—*cont.*

District.	Name of Depot.	Description of Timber and other Produce	On hand, 1st April 1888.		Received during the year.			Total.		Disposed of during the year			Balance on 31st March 1889.	
			Number or quantity.	Cubic feet.	Whence received	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Ganjam—*cont.*	Gopalpur—*cont.*	Sal scantlings.	50	151	Cut Russelkonda depot.	48 128	25 170	226	346	Sold Used departmentally. Cut into fuel.	142 4 74	155 12 170	6	9
		Sal slabs	1,982		Cut Found	6,338 113		8,433		Sold Cut into scantlings. Cut into fuel Used departmentally.	4,350 8 1,404 2,807	.. ..	364	...
		Rafters: Sal Dhau. Sajo	174	196	Cut	279	196	453	392	Sold Sent to Berhampore Used departmentally.	161 16 13	183 23 15	203	171
		Satinwood logs	35	376				35	376	Sold Cut into slabs Sample	3	31 3 3	32	339
		Ebony do	3	46				3	46				3	46
		Blackwood logs.	1	3				1	3	...			1	3
		Sajo logs	116	1,683	Surada depot	37	625	173	2,308	Sold Cut into slabs. Do. rafters. Do. fuel.	1 37 6	8 3 316 75	129	1,906
		Do sleepers	2	6		..		2	6	Sold	2	6		...
		Piasal logs	10	97	...			10	97	Do. Cut into planks	2 2	24 24	6	49
		Dhau do.	47	655	...	...		47	655	Do. rafters Sold Cut into slabs.	2 1	22 12 1	44	620
		Miscellaneous.	20	166	Berhampore depot	2	19	22	185	Sold Cut into planks.	5 1	27 9	16	149
	Dowlaishweram	Satinwood planks, &c				4	14	4	14	Sold	4	14	...	...
		Dhau do.				4	14	4	14	Do .	4	14	..	...
		Sajo do				4	14	4	14	Do.	4	14	...	...
	Madras	Satinwood logs.	6	86	Found	2	6	8	92	Do.	8	92	...	...
										Do	9	150	...	...
		Dhau logs .	8	176		1		9	176	Loss on remeasurement		26	...	...
		Sajo do	8	151				8	151	Sold	8	151	..	...
		Total, Timber	3,833	9,783		34,503	56,627	38,336	66,410		22,718	42,603	15,618	23,807
	Russellkonda.	Firewood	Tons 7	490	Cut .		30	Tons 7	520	Sold	Tons 7	520		.
	Berhampore	Do.			Gopalpur depot Hodaborosingi.	Tons 34 ,, 12½	2,380 875	,, 46½	3,255	Do.	,, 24	1,680	Ts. 22½	1,575
	Gopalpur.	Do.			Cut	,, 87	2,591	,, 87	2,591	Do Berhampore.	,, 3 ,, 84	211 2,380		...
		Charcoal	lb. 108*	19	Found	lb. 2		lb. 110	19	Sold Used departmentally	lb 82 ,, 18	14 3	lb. 10	2
		Chips			Do.		37		37	Sold		37	..	...
		Total, Fuel		509			5,013		6,423			4,845	..	1,577
	Surada	Gallnuts		Mds 57					Mds. 57	Sold		Mds 57	..	..
		Gum		,, 1					,, 1	Do		,, 1	..	..
		Gillo fruits.		,, 749+					,, 749	Podded	..	,, 749	...	..
		Do seed		..	Podded		Mds 40		,, 40	Sent to Berhampore		,, 30	...	Mds. 10
	Berhampore.	Do. do.		.	Surada depot		,, 30		,, 30			.	...	,, 30
		Total, Minor Produce.		Mds 807		.	Mds 70		Mds 877		..	Mds 837		Mds. 40
Vizagapatam.	Rajam	Sal rafters	.	.	Palconda Agency.	29	43½	29	43½	Sold	29	43½	...	.
		Nallamaddi logs		...	Do.	8	84	8	84	Do.	8	84	.	
		Miscellaneous.	..	..	Do.	11	16½	11	16½	Do. .	11	16½	.	.
		Total, Timber.			...	48	144	48	144		48	144		
Godavari.	Madras ..	Satinwood.	..	...	Found in depot.	2	6	2	6	Sold	2	6	.	...
		Ironwood	1	15				1	15	Do.	1	15	.	...
		Miscellaneous.	3	29	..	...		3	29	Do. ..	3	29	.	.
		Total, Timber.	4	44	...	2	6	6	50		6	50		
Nellore.	Do.	Casuarina poles.	1	2	...			1	2				1	2
		Total, Timber.	1	2	.	...	.	1	2	..			1	2

* Given last year under Berhampore by mistake.
† 40 maunds of seed.

Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1888-89—*cont.*

District.	Name of Depot.	Description of Timber and other Produce.	On hand, 1st April 1888.		Received during the year.			Total.		Disposed of during the year.			Balance on 31st March 1889.	
			Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Nellore.	Madras.	Firewood. Junglewood.	331,499	32,232	Sriharikota	1,895,960	94,385	2,227,550	126,627	Sold ...	1,427,919	71,129	799,865	55,440
					Increase on remeasurement.	100	10			Loss on remeasurement.	675	58		
		Sulli bundles.	489	652	Sriharikota	78,201	104,268	78,690	104,920	Sold	9,783	13,045	68,906	91,875
										Loss on remeasurement.	1			
		Casuarina.	...	...	Dugarazpatam.	Ts. 607	24,280	Tons. 607	24,280	Sold .	Ts. 601½	24,280	...	...
										Loss on reweighment.	„ 5½			
		Poles ...	...	...	...	„ 8	16	„ 8	16	Used departmentally.	8	16	...	...
		Total, Fuel.	..	32,884	...	...	222,959		255,843	...	...	108,528	...	147,315
		Rattans* ...	Bds. 35	Mds. 105	Sriharikota.	Bds. 103	Mds. 309	Bds. 138	Mds. 414	Sold	Bds. 128	Mds. 384	Bds. 10	Mds. 30
					Do. ..	...	„ 219			Sold ..	...	„ 220½		
		Sarsaparilla.	...	5	Increase on reweighment.	...	„ 7½	...	„ 231½	Used experimentally.	...	„ 5	...	...
		Total, Minor Produce.	...	Mds. 110	...	..	Mds. 535½	...	Mds. 645½	...	...	Mds. 615½	...	Mds. 30
Cuddapah.	Kodur...	Redwood roots and stumps.	Ts. 190	8,076	Cherlopalle ...	Ts. 900	43,200	Ts. 1,090	51,276	...	...	...	Ts. 1,090	51,276
	Podapad.	Do. ...	„ 130	6,270	Seshachellam.	„ 100	4,800	„ 230	11,070	...	...	...	„ 230	11,070
	Orumpad.	Do. .	„ 76	3,648	Do. ...	„ 900	43,200	„ 976	46,848	...	..	...	„ 976	46,848
		Teak logs ...	...	...	Nallamalai.	No. 2	15	No. 2	15	Sold	No. 2	15	...	...
		Thamba slabs.	...	...	Seshachellam.	„ 50	50	„ 50	50	...	...	...	No. 50	50
		Total, Timber.	...	18,594	...	...	91,265	...	109,859	...	...	15	...	109,844
	Cuddapah.	Firewood ..	...	...	Palconda ...	Ts. 3½	196	Ts. 3½	196	Sold	Ts. 3½	196	...	...
		Total, Fuel.	...	...	..	Ts. 3½	196	Ts. 3½	196	...	Ts. 3½	196	...	...
		Gallnuts B.	...	Mds. 999	...	...	..	...	Mds. 999	...	...	...	...	Ms. 999
		Do. C.	...	...	Kurapalle depot.	..	Ms. 1,666½	...	„ 1,666½	Sold ..	...	1,515½	...	...
										Dryage ..	...	150½		
	Mamillapalle.	Do. C.	...	Mds. 355	Palconda forests.	...	„ 293	..	„ 648	Sold	...	630	...	Ms. 18
	Wontimitta.	Do. C.	..	„ 882	Do. ...	...	„ 133	...	„ 1,015	...	...	...	...	„ 1,015
		Do. B.	...	„ 151		...	...	...	„ 151	...	...	...	...	„ 151
	Kurapalle.	Do. C.	...	„ 2,035	Palconda ..	...	138	..	2,173	Sent to Cuddapah.	...	1,666½	...	...
										Sold .	...	342½		
										Dryage ..	...	164		
	Pulisottivandlapalle.	Do. C.	...	733	Do. ...	...	233	...	966	Do. ...	...	378	...	
	Cuddapah.	Wax	.	...	Badvel depot.	.	1 lb.	..	1 lb.	Sold	. .	1 lb.	...	..
		Honey ..	.	.	Do.	Bottles 12.	1	Bottles 12	1	Do. ...	12 bottles.	1	...	...
		Oranges †	...	..	Horsley Konda.	No. 2,504	33½	No. 2,504	33½	Do. . .	No. 2,504	33½	...	...
		Rathipuvu.	..	...	Do. ..	...	31	...	31	Sent to Bellary and Anantapur D. F. O.'s office for sale.	...	31	...	...
		Total, Minor Produce.	..	Mds. 5,155	...	...	Mds. 2,529	...	Mds. 7,684	...	...	Mds. 4,913	...	M. 2,771
Kurnool.	Nandikotkur, &c.	Gallnuts B.	..	Mds. 1,530	...	...	...	...	Mds. 1,530	Written off as valueless.	...	Mds. 1,530	...	...
		Total, Minor Produce.	..	Mds. 1,530	...	...	..	...	Mds. 1,530	...	.	Mds. 1,530	...	...
Bellary.	Hospet...	Firewood ‡	Tons. 11	759	Sandur ...	Tons. 84	5,796	Tons. 95	6,555	Sold ...	Tons. 70	4,830	Tons. 25	1,725
	Bellary...	Creeper fuel.	..	..	Do. .	„ 9½	655	„ 9½	655	...	...	..	„ 9½	655
		Total, Fuel ..	11	759	..	Tons. 93½	6,451	Tons. 104½	7,210	...	Tons. 70	4,830	Tons. 34½	2,380
	Bellary...	Kapila dye.	lbs. 20		..	.	...	lbs. 20		Sold	lbs. 20	...	...	...
		Total, Minor Produce.	lbs. 20	...	..	..	...	lbs. 20	...	...	lbs. 20	...	...	...
Anantapur.	Gooty ..	Palmyra ..	1	2	...	...	...	1	2	Used for demarcation.	1	2	...	...
		Total, Timber	1	2	.	...	...	1	2	...	1	2	...	...

* 1 bundle rattan = 3 maunds of 25 lb. each.
† 75 fruits to a maund.
‡ 1 ton = 99 c. ft. according to Railway specification.

Receipts and Issues of Timber and other Produce in Sale Depôts during the year 1888-89—*cont.*

District.	Name of Depot.	Description of Timber and other Produce.	On hand, 1st April 1888.		Received during the year.			Total.		Disposed of during the year.			Balance on 31st March 1889.	
			Number or quantity.	Cubic feet.	Whence received.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.	How disposed of.	Number or quantity.	Cubic feet.	Number or quantity.	Cubic feet.
Anantapur.	Bukkapatnam.	Honey ...	Mds. 1½	...	Penukonda / Hindupur	Mds. 120½	...	Mds. 131	..	Sold	Mds. 9	..	Mds. 122	...
		Wax ...		...	Do. ...	,, 5½	...	,, 5½	...	Do.	,, 5	...	,, ½	...
		Gallnuts B.	Mds. 232	...	...	...	...	232	...	Written off accts.	,, 232	...	...	...
		Do. C.	...	...	Penukonda range.	Mds. 86½	...	,, 86½	...	Sold	,, 86½	...	...	...
		Tamarind...	Mds. 4½	...	...	...	...	,, 4½	...	Do.	,, 4½	...	...	...
		Yellama gum.	...	..	...	Mds. 52½	...	,, 52½	..	Do.	,, 2	..	Mds. 50½	...
		Yepi fibre ..	...	...	..	,, 2	...	,, 2	..	Do.	,, 2	...	...	...
		Sara nuts .	...	...	..	Meas. 7½	or ½ md.	Meas. 7½	or ½ md.	..	..	...	Meas. 7½	or ½ md.
	Gooty	Babul pods .	Mds.1,658	...	...	..	...	,, 1,658	...	Written off accts.	Mds. 1,658	...	...	...
		Do. bark .	Mds. 1	...	...	...	...	,, 1	...	Do. ...	,, 1	...	...	...
		Gum ...	,, 1½	...	...	...	...	Mds. 1½	.	.. ...	...	...	Mds. 1½	...
		Total, Minor Produce.	Mds.1,898	...	..	Mds. 276½	...	Mds. 2,174½	..	...	Mds.2,000	...	Mds. 174½	...
Nilgiris.	Coonoor.	Acacia rafters.	211	105½	Forests ...	532	266	743	371½	Sold	190	95	363	181½
										Used deptly.	100	95		
		Acacia planks.	...	...	Do. ...	62	62	62	62	Do. ...	51	51	9	9
										Sold	2	2		
		Drag poles ..	487	487	Coonoor peak.	1,030	1,030	3,357	3,357	Do. ..	2,069	2,069	98	98
					Bleak house.	940	940			Conversion ...	650	650		
										Used deptly.	540	540		
		Total, Timber.	698	592½	...	3,464	3,198	4,162	3,790½	.	3,692	3,502	470	288½
	Ootacamund.	Firewood ..	Lots 30½ (48 tons.)	3,050	Governor's sholn.	Lts. 131½	*13,150	Lots 543½	54,350	Sold	Lots 443	44,300	Lts. 44½	4,475
					Cairn Hill ...	,, 113	11,300			Used deptly.	½	75		
					Aramby ...	,, 268½	26,850			Dryage ...	55	5,500		
		Bark ...	...	...	Found in depot.	Ct. lds. 3	60	Ct. lds. 3	60	Sold	Ct. lds. 3	60	...	...
		Charcoal * ...	Bags 30 (¼ ton)	268	Coonoor ...	Bgs. 637	5,687	Bags 667	5,955	Do. ..	Bgs. 631	5,654	Bgs 34	303
										Wastage ..	Do. 2	18		
					Coonoor Peak.	Lts. 168½	16,850			Sent to Wellington.	Lots. 1½	175		
	Coonoor.	Firewood ...	Lots 59½ (93 tons.)	5,950	Conversion in depot.	,, 2	200	Lots 231	23,100	Sold	Do. 99½	9,950	Lts. 94½	9,425
					Ghat reserve.	,, 1	100			Dryage ...	35½	3,550		
		Bark ..	...	...	Found in depot.	Ct.lds. 55	1,100	55	1,100	Sold	Ct.lds. 55	1,100	...	...
					Coonoor Peak.	Lts. 557	55,700							
					Bandy shola .	,, 1½	175			Sold	Lots. 510½	51,050		
		Firewood ...	Lots 56½ (89 tons.)	5,675	Bleak house .	,, 38½	3,850	656	65,600	Used deptly.	,, 3	300	77	7,700
					Sim's Park ...	,, ¼	25			Dryage * ..	,, 65½	6,550		
					Coonoor depot.	,, 1½	175							
		Charcoal ...	Bags 26 (¼ ton.)	232	Bandy shola.	Bgs. 484	3,875	Bags 400	4,107	Sold	Bgs. 416	3,714	Bgs. 44	393
		Bark ..	..	...	Found in depot.	Ct.lds. 18½	365	Ct. lds. 18½	365	Do. ...	Ct.lds.18½	365	..	...
		Chips ...	...	...	Do. ...	,, 57½	1,145	,, 57½	1,145	Do. ...	,, 57½	1,145	..	...
		Total, Fuel ..	...	15,175	.		140,607	.	155,782	..	..	133,486	..	22,296
	Coonoor.	Gallnuts ...	...	...	Molur ...	Mds. 22	..	Mds. 22	...	...	...	...	Mds. 22	...
		Total, Minor Produce.	...	...	...	Mds. 22	.	Mds. 22		...	...		Mds. 22	...

* 1 bag = 50 lb. = 500 lb. firewood.

ANNUAL FORM No. 71.

Forest Department, Madras, Northern Circle.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89.

District.	Depot or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold, but remaining unremoved.
			SOLD FROM DEPOT.				Rs. A. P.	Rs. A. P.		
Ganjam.	Russellkonda.	I (a)	Sal logs	185	633	.....	119 0 0	90 8 0	...	...
			,, blocks	19	52	Rs. 0 3 0	9 12 0	9 12 0	...	...
			,, sleepers	9	20	.....	2 9 0	2 9 0	...	...
			,, slabs, &c.	299	100	.....	6 5 0	6 5 0	...	...
			Timber of old temporary sheds.	...	...	.....	13 0 0	13 0 0	...	...
	Berhampore.		Piasal logs	2	19	Rs. 0 6 0	7 10 0	7 10 0	...	...
			Sal rafters	16	23	.....	16 2 0	16 2 0	...	...
			Do.	43	352	.....	211 14 0	211 14 0	...	...
	Gopalpur		Sal sleepers	2,528	8,888	.....	6,059 0 0	6,059 0 0	...	...
			,, scantlings	142	155	.....	113 13 2	113 13 2	...	...
			,, slabs	4,350	1,420	.....	161 1 9	161 1 9	...	...
			,, rafters	161	183	.....	86 13 4	86 13 4	...	...
			Satinwood logs	3	31	.....	18 12 0	18 12 0	...	...
			Sajo logs	1	8	Rs. 0 4 0	2 0 0	2 0 0	...	...
			,, sleepers	2	6	,, 1 4 9	2 9 6	2 9 6	...	...
			Piasal	2	24	,, 0 8 0	12 0 0	12 0 0	...	...
			Dhau	1	12	,, 0 4 0	3 0 0	3 0 0	...	...
			Miscellaneous	5	27	,, 0 4 0	6 12 0	6 12 0	...	...
	Dowlaishwaram.		Satinwood scantlings.	4	14	.....	21 4 0	21 4 0	...	...
			Dhau ,,	4	14	.....	17 11 4	17 11 4	...	...
			Sajo ,,	4	14	.....	17 11 4	17 11 4	...	...
	Madras		Dhau logs	9	150	Rs. 0 8 0	74 9 3	74 9 3	...	...
			Sajo ,,	8	151	,, 0 8 0	*75 8 0	75 8 0	...	...
			Satinwood logs	8	92	,, 1 0 0	92 8 0	92 8 0	...	...
			Total, Timber	...	12,418	.....	7,151 5 8	*7,122 13 8	...	...
	Russellkonda. Berhampore. Gopalpur	I (b)	Firewood	Tons 7	520		5 10 6	5 10 6	...	...
			Do.	,, 24	1,680	Rs. 5 0 0	120 0 0	120 0 0	...	...
			Do.	,, 3	211	... ..	12 0 6	12 0 6	...	...
			Charcoal	lb. 82	14	... ..	2 0 0	2 0 0	...	...
			Chips	...	37	... ..	2 10 6	2 10 6	...	...
			Total, Fuel	...	2,462	.....	142 5 6	† 142 5 6	...	...
	Surada	I (c)	Gallnuts	..	Mds. 57	.....	3 0 0	3 0 0	...	...
			Gum	..	,, 1	.....	0 8 0	0 8 0	...	...
			Total, Minor Produce	..	Mds. 58	.....	3 8 0	3 8 0	...	...
			Total, Ganjam	...	...	.....	7,297 3 2	7,268 11 2	...	...
Vizagapatam.	Rajam	I (a)	Sal rafters	29	43½		14 10 0	14 10 0	29	...
			Nallamuddi logs	8	84	Rs. 2 0 0	16 0 0	16 0 0	8	...
			Miscellaneous	11	16½		6 15 0	6 15 0	11	...
			Total, Timber	48	144	... ..	37 9 0	37 9 0	48	...
			Total, Vizagapatam	...	...	.....	37 9 0	37 9 0	...	...
Godavari.	Madras	I (a)	Satinwood	2	6	Rs. 1 0 0	6 8 0	6 8 0	2	...
			Ironwood	1	15	,, 0 8 0	7 8 0	7 8 0	1	...
			Miscellaneous	3	29	,, 0 8 0	14 8 0	14 8 0	3	...
			Total, Timber	6	50	.....	28 8 0	28 8 0	6	...
			Total, Godavari	...	...	.....	28 8 0	28 8 0	...	...
Nellore.	Madras	I (b)	Junglewood	1,427,019	71,129	Rs. 2 10 0 to ,, 15 0 0	14,867 0 10	14,867 0 10	1,427,019	...
			Sulli bundles	9,783	13,044	As. 3½ to As. 2.	1,792 7 0	1,792 7 0	9,783	...
			Casuarina wood	Tons 601¼	24,060	Rs. 5½ to Rs. 8.	4,302 6 1	4,302 6 1	601¼	...
			Total, Fuel	...	1,08,233	.....	‡20,961 13 11	20,961 13 11	...	...
		I (c)	Rattans, bundles	128	Mds. 884	Rs. 5 12 0	736 0 0	736 0 0	128	...
			Sarsaparilla	..	,, 226½	,, 1 8 0	309 6 0	309 6 0	Mds. 226½	...
			Total, Minor Produce	..	Mds. 610½	.....	1,045 6 0	1,045 6 0	...	...
			Total, Nellore	..	..	.....	22,007 3 11	22,007 3 11	...	...
Cuddapah.	Cuddapah	I (a)	Teak logs	2	15	Auction.	18 4 0	18 4 0	2	...
			Total, Timber	2	15	.....	18 4 0	18 4 0	2	...
	Cuddapah	I (b)	Firewood	Tons 2	112	Rs. 6 8 0 per ton.	13 0 0	13 0 0	Tons 2	...
			Do.	,, 1¼	84	Auction.	8 2 0	8 2 0	,, 1¼	...
			Total, Fuel	Tons 3¼	196	.....	21 2 0	21 2 0	Tons 3¼	...
	Badvel	I (c)	Wax	lb. 1	..	Auction.	0 6 0	0 6 0	lb. 1	...
			Gallnuts	...	1,514¼ mds.	Rs. 0 6 3	591 6 6	591 6 6	Mds. 1,514¼	...
			Galls	...	1¼ ,,	Auction.	3 11 9	3 11 9	,, 1¼	...
	Cuddapah		Honey	Bottles 12	1 ,,	As. 12	0 0 0	9 0 0	Bots. 12	...
			Oranges	No. 2,504	33½ ,,	.....	38 15 0	38 15 0	No. 2,504	...
	Mamillapalle Kurrapalle		Gallnuts	...	630 ,,	As. 10	403 9 6	403 9 6	Mds. 630	...
			Do.	...	342½ ,,	.....	154 0 0	154 0 0	,, 342½	...
			Total, Minor Produce	...	2,522½	.....	1,201 0 9	1,201 0 9	...	...
			Total, Cuddapah	...	..	.....	1,240 6 9	1,240 6 9	...	...

	Rs. A. P.
* Sales from depot ...	7,122 13 8
Do. locally ...	79 12 0
	7,202 9 8
Add receipts on account of previous year ..	1,614 2 4
	8,816 12 0 I(a).

‡ Rs. 120 not accounted for.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Depot or locality.	Budget sub-head	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed	Number sold, but remaining unremoved
							Rs A P.	Rs A. P		
Bellary	Hospet	I (b)	Firewood	Tons. 45	3,105	Auction.	310 0 0	310 0 0	Tons 45	
			Do	,, 25	1,725		31 4 0	31 4 0	,, 25	
			Total, Fuel	Tons 70	4,830		341 4 0	341 4 0	Tons 70	
	Bellary	I (e)	Kapila dye	lbs 20		Rs 12 0 0 per md	9 9 7	9 9 7	lbs. 20	
			Total, Minor Produce	lbs. 20			9 9 7	9 9 7	lbs 20	
			Total, Bellary				350 13 7	350 13 7		
Anantapur	Bukkapatnam	I (e)	Honey		Mds. 9	Rs. 2 4 0	20 1 9	20 1 9	Mds. 9	
			Wax		,, 5		47 8 0	47 8 0	,, 5	
			Gallnuts		,, 86½	Rs 0 10 6	56 11 5	56 11 5	,, 86½	
			Yellama gum		,, 2	,, 2 8 0	5 0 0	5 0 0	,, 2	
			Tamarind		,, 4½	,, 0 4 0	1 2 0	1 2 0	,, 4½	
			Yepi fibre		,, 2		1 1 6	1 1 6	,, 2	
			Total, Minor Produce		Mds. 109		131 8 8	131 8 8	Mds 109	
			Total, Anantapur			...	131 8 8	131 8 8		
Nilgiris	Coonoor	I (a)	Planks	2	2	As. 14	1 12 0	1 12 0	2	
			Rafters	190	95		107 1 4	107 1 4	190	
			Drag poles	2,069	2,069	As. 2	258 10 0	258 10 0	2,069	
			Total, Timber	2,261	2,166		367 7 4	367 7 4	2,261	
	Ootacamund	I (b)	Firewood	Lots 443	44,300	Rs 3	4,043 15 11	4,027 10 10	Lots 443	
			Charcoal	Bags 631	5,434	Re 1	631 0 0	631 0 0	Bags 631	
			Bark	Ct lds 3	60	Auction.	0 14 0	0 14 0	Ct lds. 3	
	Coonoor		Firewood	Lots 99½	9,950		775 4 0	775 4 0	Lots 99½	
			Bark	Ct lds 55	1 100	Auction	13 12 0	13 12 0	Ct lds 55	
	Wellington		Firewood	Lots 510½	51 050		4,786 10 11	4,786 10 11	Lots 510½	
			Charcoal	Bags 416	5,714	Re 1	416 0 0	416 0 0	Bags 416	
			Bark	Ct lds 18½	365	Auction.	12 2 8	12 2 8	Ct lds. 18½	
			Chips	Ct lds 87½	1,145	As 5	17 14 3	17 14 3	Ct. lds 87½	
			Total		117,318		11,297 9 9	*11,281 4 8		
			Total, Nilgiris				11,665 1 1	11,648 12 0		
			Total, sold from Depot				42,758 6 2	42,713 9 1		
			SOLD LOCALLY.							
Ganjam.	Gayagonda	I (a)	Sal logs	88	590		16 0 0	16 0 0	Sold in 1887, but not entered in return of 1887-88	...
			Pinnai logs	1	7		1 0 0	1 0 0		
			Sajo do.	2	12		1 0 0	1 0 0		
			Ebony do.	4	24		1 0 0	1 0 0		
			Miscellaneous	4	46		1 0 0	1 0 0		
	Jaganathprasad		Slabs	144			28 12 0	28 12 0		..
			Slabs	107			31 0 0	31 0 0		
			Total, Timber	350	679		79 12 0	79 12 0		
	Darpangia and Gullery, Pondakhol.	I (b)	Firewood	61	4,278		30 0 0	30 0 0		
			Do	130½	9,067		32 6 7			
			Total, Fuel	191½	13,345		62 6 7	30 0 0		
	Buguda	I (e)	Mango fruit		Md 1	Auction.	0 8 0	0 8 0		
			Moholo flowers		Mds 40		4 0 0	4 0 0		
			Total, Minor Produce		Mds 41		4 8 0	4 8 0		
			Total, Ganjam				146 10 7	114 4 0		
Godávari.	Rekapalle	I (b)	Firewood		486	Re 1 per c yard	18 0 0	18 0 0	C. ft. 486	
			Total, Fuel		486		18 0 0	18 0 0	C. ft 486	
			Total, Godávari				18 0 0	18 0 0		
Kistna	Bezváda	I (a)	Tumma poles	81	81	Auction	10 4 6	10 4 6	81	
	Guntur.		Do	123	20		2 8 0	2 8 0	123	
	Palnad		Thorns	72	360		4 1 0	4 1 0	72	
			Do	560	2,800	..	3 1 0	3 1 0	560	
			Total, Timber	836	3,261		19 14 6	19 14 6	836	
	Bezváda	I (b)	Firewood	..	20	Auction.	1 9 0	1 9 0	C ft. 20	
	Krosur		Do	.. ..	9,320		31 14 0	31 14 0	,, 9,320	
	Guntur		Do	.	140		26 4 0		,, 140	
	Bapatla		Do.	..	10		0 4 0	0 4 0	,, 10	
	Palnad		Do.		500		6 0 0	6 0 0	,, 500	
			Total, Fuel		9,990		65 15 0	39 11 0	C. ft 9 990	
			Total, Kistna				85 13 6	59 9 6		

		Rs A P
* Sales from depot	..	11,281 4 8
Do locally	.	6,270 11 3
		† 17,551 15 11

† Audited figures give Rs. 17,766, the Rs. 214 difference is not explained, but is probably due to collection of outstandings.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Depot. or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity.	Cubic feet.	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold, but remaining unremoved.
							Rs. A. P.	Rs. A. P.		
Nellore	Casuarina plantation.	I (*b*)	Casuarina wood	Tons 4,012	160,480	Rs. 5-3-0 & Rs 5-4-0	20,828 8 1	20,828 8 1	Tons 4,012	...
			Fuel	Cart lds. 5	100	Rs. 1 to Rs 2-8-0	13 8 6	13 8 6	Cart lds. 5	.
			Pegs and stakes	pieces 23,900	16,650	,,	119 8 0	48 12 9	Pieces 23,900	.
			Total, Fuel		177,230		20,961 8 7	20,890 13 4	.	.
	Sriharikota	I (*e*)	Soapnuts		Mds 1,070	Rs 9 per candy	481 8 0	481 8 0	Mds. 1,070	.
			Orchella	.	,, 8	,, 46 ,,	18 15 7	18 15 7	,, 8	..
			Chey root		,, 696	,, 75 ,,	2,610 0 0	2,610 0 0	,, 696	.
			Sarsaparilla*	.			30 0 0	30 0 0	...	...
			Total, Minor Produce		Mds 1,774		3,140 7 7	3,140 7 7	Mds. 1,774	.
			Total, Nellore				24,102 0 2	24,031 4 11	...	..
Cuddapah.	Kodur	I (*a*)	Teak posts	3	3	Auction.	96 6 0	96 6 0	212	...
			Red wood	73	73					
			Miscellaneous timber	136	136					
	Settigunta		Red sander posts	17	17	Do.	6 0 0	6 0 0	32	...
			Miscellaneous	15	15					
	Rajampet		Red sander posts	350	350	Do.	48 4 0	48 4 0	350	..
			Yellama	280	280				280	
	Cuddapah		Do	8	400	Do.	15 2 0	15 2 0	8	.
			Palmyra trees	12	24	Do.	59 11 0	59 11 0	12	
	Rayachoti		Red sander poles	100	100	Do.	81 0 0	81 0 0	50	50 .
	Seshachellum		Miscellaneous timber	48	48	Do.	14 4 0	14 4 0	48	
			Total, Timber .	1,042	1,446		320 11 0	320 11 0	992	50
	Kodur	I (*b*)	Firewood	Tons 1	56	12 as. per ton.	0 12 0	0 12 0	Ton 1	
	Kothakota		Do.	,, 93½	5,236	20½ tons at 8 as. & the rest at 12 as	65 0 0	65 0 0	,, 93½	.
	Sancherla		Do.	,, 40	2,240	20 tons at 5 as. & 20 tons at 8 as.	16 4 0	16 4 0	,, 40	...
	Gopavaram		Do.	,, 14	784	As. 12	10 8 0	10 8 0	,, 14	..
	Kalasapad		Do.	,, 47	2,632		20 10 0	20 10 0	,, 47	...
	Lankamalais		Do.	,, ½	28	As. 12	0 6 0	0 6 0	,, ½	
	Ganugapenta		Do.	,, ½	28	As. 12	0 6 0	0 6 0	,, ½	.
	Kavalakunta		Do.	,, 7½	420	Auction.	2 0 0	2 0 0	,, 7½	.
	Kanchalamoram.		Do.	,, ½	28	As 12	0 6 0	0 6 0	,, ½	
			Total, Fuel	Tons. 204½	11,452		116 4 0	116 4 0	Tons 204½	
	Madanapalle .	I (*e*)	Coffee		Mds. 2½	Rs 8 per md.	19 0 0	19 0 0	Mds. 2½	.
			Pears	120	,, 1½		2 15 0	2 15 0	No. 120	
			Pomegranates	76	,, 1	Auction	1 12 0	1 12 0	,, 76	
			Pumelos	1,466	,, 91½		17 14 6	17 14 6	,, 1,466	
			Jack fruits	16	,, 8		4 5 0	4 5 0	,, 16	...
			Mangoes	376	,, 17½	100 at Rs 3 & the rest by auction	6 2 0	6 2 0	,, 376	..
			Do.	924		100 at Rs. 2-8-0 & the rest by auction	22 0 0	22 0 0	,, 924	
			Oranges	5,142	,, 68½	100 at Rs 1-8-0 & 1,567 at Rs 1 per 100 & the rest by auction.	35 1 9	35 1 9	,, 5,142	...
			Total, Minor Produce	8,120	Mds. 190½	.	109 2 3	109 2 3	.	
			Total, Cuddapah	.			546 1 3	546 1 3	..	...
Kurnool.	Nandyal	I (*a*)	Miscellaneous poles	64	640	Rs 9 per pair of 12 fellocs & 24 spokes.	95 0 0	95 0 0	64	.
			Felloes	447	87		336 15 0	336 15 0	447	...
			Spokes	903	113				903	..
			Total, Timber	1,414	780		431 15 0	431 15 0	1,414	.
	Kurnool	I (*b*)	Firewood	Cart lds. 13	260	Rs. 3-6-0 per cart	43 14 0	43 14 0	Cart lds. 13	
			Total, Fuel	Cart lds 13	260		43 14 0	43 14 0	Cart lds. 13	
	Nandikotkur Markapur Nandyal	I (*e*)	Yellama gum		Mds. 10½	9 mds. at Rs 3 & 1½mds. at Rs 3-9	32 15 0	32 15 0	Mds. 10½	...
			Soapnuts ..		,, 5½	Rs. 27 per 640 seers.	9 11 0	9 11 0	,, 5½	...
			Honey		,, 5	Rs. 1 12 0	9 0 0	9 0 0	,, 5	
			Gallnuts		,, 21½	17 mds at 6 annas & 4½ mds. at 2½ mds. per rupee.	8 4 0	8 4 0	,, 21½	...
	Cumbum		Marking nuts ...		,, ½	3 pies per seer.	0 4 6	0 4 6	,, ½	...
			Tamarind		,, 122½	...	37 4 0	37 4 0	,, 122½	...
			Do.				2 0 0	2 0 0	..	
			Total, Minor Produce		166½		99 6 6	99 6 6	166½	
			Total, Kurnool	.		..	575 3 6	575 3 6	...	...
Bellary.	Sandur	I (*a*)	Teak poles	400	1,200	Rs. 1 2 0	450 0 0	450 0 0	400	...
			Rafters	1,636	3,272	Per 100 0 14 8	237 7 0	237 7 0	1,636	.
			Total, Timber.	2,036	4,472		687 7 0	687 7 0	2,036	...
	Sandur Adoni ...	I (*b*)	Railway fuel	Tons 1,273	87,837	As. 12 to Rs. 1-9-0	1,443 15 0	1,443 15 0	Tons 1,273	...
			Rejected wood	,, 20½	1,414	Auction.	48 10 0	48 10 0	,, 20½	.
			Dead tree & stumps	No. 33	64		1 0 0	1 0 0	No. 33	...
			Total, Fuel ..	...	89,315	...	1,493 9 0	1,493 9 0	...	...

* Deposit.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District	Depot or locality.	Budget sub-head.	Description of timber and other produce.	Number or quantity	Cubic feet.	Rate.	Total amount of sale	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold, but remaining unremoved
							Rs. A. P	Rs. A. P		
Bellary —*cont.*	Sandur	I (*c*)	Large bamboos	75		Rs 15 per 100	11 4 0	11 4 0	75	
			Middle size ,,	150		,, 6½ ,, ,,	9 12 0	9 12 0	150	
			Small ,, ,,	57,962		,, 2½ ,, ,,	1,593 15 6	1,593 15 6	57,962	
			Total, Bamboos	58,187			1,614 15 6	1,614 15 6	58,187	
	Do	I (*e*)	Kapila dye	lbs 5		Auction	0 13 0	0 13 0	lbs 5	
			Tamarind		Mds 43	do.	0 3 0	0 3 0	Mds. 43	
	Bellary		Honey		,, 9	Rs. 3-8-0 per md.	28 3 6	28 3 6	,, 9	
			Wax		,, 2		16 10 8	16 10 8	,, 2	
			Total, Minor Produce	lbs 5	Mds 54		45 14 2	45 14 2	Mds 54	
			Total, Bellary				3,841 13 8	3,841 13 8		
Anantapur.	Muchukota	I (*a*)	Yepi pieces ,,	1,575	1,575	Auction	81 7 2	81 7 2	1,575	
			Total, Timber	1,575	1,575		81 7 2	81 7 2	1,575	
	Do	I (*b*)	Brushwood	4 cart loads	80	Auction.	1 8 0	1 8 0	4 cart loads	
			Total, Fuel	4 cart loads	80		1 8 0	1 8 0	4 cart loads	
	Do	I (*e*)	Yepi fibre		Mds 50	8 as	25 0 0	25 0 0	Mds. 50	
			Wax ...		,, 1½	Rs 8	9 12 0	9 12 0	,, 1½	
	Vanavole		Honey		,, ½		1 0 0	1 0 0	,, ½	
			Yellama gum		,, 23	Rs 2 8-0 10 as.	53 5 9 / 1 1 6	53 5 9 / 1 1 6	,, 23	
			Saranuts	45 measures or 5 measures of pulp	,, 4	5 as.	1 9 0	1 9 0	,, 4	
	Kondapuram		Tamarind		,, 9				,, 9	
			Kanuga seeds †	Tooms 12½ or	,, 20	Auction.	4 4 0	4 4 0	12½ tooms or 20 mds	
			Total, Minor Produce		Mds. 107½		96 0 3	96 0 3	Mds. 107½	
			Total, Anantapur				178 15 5	178 15 5		
Nilgiris	Coonoor	I (*a*)	Slabs	8½ loads	100		4 0 0	4 0 0	8½ loads.	
	Kotagiri		Planks	No 1	1	Re 1	1 0 0	1 0 0	1 No.	
			Rafters	34	17		20 15 0	20 15 0	34 ,,	
			Drag poles	235	235		42 12 0	42 12 0	235 ,,	
			Blackwood	3	94		35 2 11	35 2 11	3 ,,	
			,, pieces	12	28		4 4 0	4 4 0	12 ,,	
			Teak	12	270		51 14 10	51 14 10	12 ,,	
			,, pieces	1,615	7,427		594 6 6	594 6 6	1,615 ,,	
	Mudumalai and Bonne		Vengai ,,	86	150		37 15 5	37 15 5	86 ,,	
			Junglewood pieces	194	1,200		27 14 0	27 14 0	194 ,,	
			Teak	476	12,315		8,204 3 4	7,204 3 4	476 ,,	
			,, poles	31	95		31 12 0	31 12 0	31 ,,	
			Vengai	152	5,158		1,876 10 1	1,876 10 1	152 ,,	
			Blackwood	12	676		325 7 0	325 7 0	12 ,,	
			Mutti logs	24	848		232 14 2	232 14 2	24 ,,	
			Drag poles	7	7		0 14 0	0 14 0	7 ,,	
			Total, Timber		25,961		11,492 1 3	10 492 1 3		
	Aramby	I (*b*)	Eucalyptus firewood	480 lots.	48,000		2,188 15 0	2,188 15 0	480 lots.	
			Do	3,069 hd loads.	3,069	1 as.	191 13 0	191 13 0	3,069 hd loads.	
			Eucalyptus leaves	838 ,,	838		13 1 6	13 1 6	838 ,,	
	Cairn Hill		Firewood	109½ lots	10,975		834 12 0	834 12 0	109½ lots.	
			Do	3,939 hd loads	3,939				3,939 hd. loads.	
			Creepers	284 ,,	284		17 12 0	17 12 0	284 ,,	
			Eucalyptus leaves	80 ,,	80	3 pies.	1 4 0	1 4 0	80 ,,	
	Governor's Shola		Eucalyptus firewood	200 lots	20,000		1,050 1 0	1,050 1 0	200 lots.	
			Do.	2,801 hd loads	2,801				2,801 hd. loads.	
	Snowdon		Acacia firewood	3 lots.	300		18 0 0	18 0 0	3 lots.	
	Lovedale		Shola ,,	2 ,,	200		11 0 0	11 0 0	2 ,,	
	Coonoor Peak		Eucalyptus ,,	68½ ,,	6,875				68½ lots.	
			Do.	333 bullock loads.	1,332		1,032 9 0	1,032 9 0	333 bullock loads	
			Do	9,450 hd. loads.	9,450				9,450 hd. ,,	
	Bleak House		Do	15 lots.	1,500				15 lots.	
			Do.	110 bullock loads.	440		479 0 0	479 0 0	110 bullock loads.	
			Do.	6,662 hd loads.	6,662				6,662 hd loads.	
			Slabs	3 cart loads	60	Rs 1-8-0	4 8 0	4 8 0	3 cart loads	
	Bandy shola		Acacia firewood	7 lots	700				7 lots.	
				585 bullock loads	2,340		220 6 0	220 6 0	585 bullock loads.	
				1,195 hd loads.	1,195				1,195 hd. loads	
			Wattle	2 cart loads	40	Rs. 2	4 0 0	4 0 0	2 cart loads.	
			Acacia charcoal	26 bags	232		24 8 0	10 0 0	26 bags.	
	Sim's Park		Shola firewood	1 cart load	20		2 0 0	2 0 0	1 cart load.	
				8 hd loads	8				8 hd loads	
	Ralla		Eucalyptus ,,	17 bull ,,	68		95 11 0	95 11 0	17 bull ,,	
				1,480 hd. ,,	1,480				1,480 hd. ,,	
	Town shola		Shola firewood	184 ,, ,,	184		11 8 0	11 8 0	184 ,, ,,	
	Burliyar		Do.	15 lots.	1,500		26 2 0	26 2 0	15 lots.	
	Kota[51]11		Do.	4½ lots	425	Rs 1-8-0	22 12 9	22 12 9	4½ lots.	
			Charcoal	35½ bags	317	Rs 1 per 50 lb	35 8 0	35 8 0	35½ bags.	
			Total, Fuel		125,914		6,285 3 3	6,270 11 3		
	Sigur	I (*d*)	Sandalwood		Mds 1,792	Rs 3-14-2	6 965 6 10	6,965 6 10	Mds 1,792	
			Total, Sandalwood		Mds. 1,792		6,965 6 10	6,965 6 10	Mds. 1,792	

† 1 toom = 64 seers.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Depot or locality	Budget sub-head	Description of timber and other produce	Number or quantity.	Cubic feet	Rate	Total amount of sale	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold, but remaining unremoved.
							Rs A P.	Rs A. P.		
Nilgiris	Ootacamund and Naduvatam	I (*e*)	Gallnuts	Mds 500			343 12 0	343 12 0	Mds. 500	..
			Sheakoy	,, 94			54 4 0	54 4 0	,, 94	..
	Coonoor and Kullar.	Do	Gallnuts	,, 36		As 10	22 8 0	22 8 0	,, 36	..
			Sheakoy	,, 25			15 10 0	15 10 0	,, 25	..
			Dammer	,, 3¾		As 4	0 15 4	0 15 4	,, 3¾	..
			Honey	,, 12			31 4 0	31 4 0	,, 12	..
			Wax	,, ¾			7 5 0	7 5 0	,, ¾	..
	Kotagiri	Do	Gallnuts	,, 757½		As 14-3	602 7 4	602 7 4	,, 757½	..
			Sheakoy	,, 163			13 6 3	13 6 3	,, 16¾	..
			Tamarind	,, 9½		As 13	6 12 2	6 12 2	,, 9½	..
			Horns	,, 7¼		Rs 2¼ to Rs 6	15 10 4	15 10 4	,, 7¼	..
			Honey	Seers 3			0 7 0	0 7 0	Seers 3	
			Wax	Mds ¼			4 2 10	4 2 10	Md. ¼	..
	Sigur	Do	Gallnuts	,, 267½		As 8	133 13 5	133 13 5	,, 267½	
			Sheakoy	,, 4½		,, 12	3 6 0	3 6 0	,, 4½	..
			Tamarind	,, 2½		,, 10	1 6 6	1 6 6	,, 2½	
			Horns	,, 7½		Rs 2½	19 7 5	19 7 5	,, 7½	..
			Honey	,, 2		Rs 4	8 0 0	8 0 0	,, 2	
			Wax	,, 1½		Rs 8	12 0 0	12 0 0	,, 1½	
	Mudumalai	Do	Gallnuts	,, 1,260			665 0 0		,, 1,260	..
			Vembadam	,, 25½			45 4 0		,, 25½	
			Tamarind	,, 110		As 12	82 8 0	540 15 6	,, 110	
			Horns	,, 9½		Rs 2	19 8 0		,, 9½	..
			Honey	,, 1½			9 13 6		,, 1½	
			Wax	,, 2½		Rs 10	27 5 0		,, 2½	
							555 0 0	555 0 0	Part payments for produce.	
							100 0 0	100 0 0	Lease.	..
							40 0 0	40 0 0	,, of coffee.	
			Total	Mds 3,158	..		2,841 9 1	2,541 9 1		
			Total, Nilgiris				27,584 4 5	26,269 12 5		..
			Total, sold locally				57 078 14 6	55,635 0 8		

Drift and Confiscated Wood.

Ganjam		III	Sál	11	78		26 6 0	26 6 0		...
			Piasal	2	19		8 14 6	8 14 6		
			Miscellaneous				5 0 6	5 0 6		
			Firewood		156		12 1 2	12 1 2		
			Charcoal		40		7 0 0	7 0 0		
			Bamboos	276			1 5 6	1 5 6		
			Moholo flowers		Mds 40		4 9 0	4 9 0		
			Total				65 4 8	65 4 8		
Vizaga-patam		Do.	Timber	235	2,120		66 6 1	66 6 1		
			Sugar-cane props		40		2 0 0	2 0 0		...
			Firewood		309		9 15 7	9 15 7		
			Charcoal		300		3 10 0	3 10 0		
			Bamboos	1,174			19 13 0	19 13 0		..
			Tangedu bark		Mds 4		1 0 0	1 0 0		
			Stones				8 14 0	8 14 0		
			Total				111 10 8	111 10 8		
Godávari	...	Do	Teak	1,037	12,909	Auction	7,907 14 6	7,907 14 6		
			Miscellaneous timber	380	2,469		319 8 1	319 8 1*		
			Fuel		6		0 8 7	0 8 7		
			Teak	20	400		17 14 0	17 14 0		
			Miscellaneous timber		1,280		57 1 6	57 1 6		
			Fuel		716		34 2 7	34 2 7	†	
			Bamboos	2,260			25 0 0	25 0 0		
			Minor produce		Mds 17		5 8 0	5 8 0		
			Total				8,367 9 3	8,367 9 3		
Kistna	...	Do	Wood		200	Auction	30 0 0	30 0 0	‡	
			Do		2,967		218 11 10	218 11 10		
			Fuel and charcoal		400		29 4 4	29 4 4		
			Bamboos	709			3 9 6	3 9 6	§	
			Minor produce Mds.	127			4 8 9	4 8 9		
			Total				286 2 5	286 2 5		
Nellore	..	Do.	Wood		200	Auction.	35 0 2	35 0 2		
			Palmyra trees		80		2 15 0	2 15 0		..
			Total				37 15 2	37 15 2		
Cudda-pah	...	Do.	Red sanders	...	848		382 1 6	367 1 6		
			Teak pieces		18		1 8 0	1 8 0		
			Yepi		12		7 3 0	7 3 0		
			Miscellaneous timber		2,072		318 7 5	318 7 5		
			Firewood		1,022		63 3 0	63 3 0		
			Charcoal		470		6 6 6	6 6 6		
			Bamboos	2,495			28 1 0	28 1 0		
			Minor produce	Mds 186			6 0 0	6 0 0		
			Total				812 14 5	797 14 5		
Kurnool	—	Do	Teakwood		50		33 0 0	33 0 0		
			Miscellaneous wood	..	30,125		1,727 13 6	1,727 13 6		
			Firewood		3,215		133 13 8	133 13 8		

* Drift. † Confiscated. ‡ Drift. § Confiscated.

Sales of Timber and other Produce cut and collected by Government Agency during the year 1888-89—*cont.*

District.	Depot or locality.	Budget sub-head.	Description of timber and other produce	Number or quantity.	Cubic feet	Rate.	Total amount of sale.	Amount actually paid.	Number of logs and pieces, &c., removed.	Number sold, but remaining unremoved.
			Drift and Confiscated Wood—cont.				Rs. A. P.	Rs. A. P.		
Kurnool —*cont.*		III	Charcoal		740	...	25 0 0	25 0 0		
			Bamboos		No 607	..	8 10 0	8 10 0		
			Stones		Mds. 75	...	4 4 0	4 4 0		
			Axes ...	..			4 4 0	4 4 0		
			Total				1,936 13 2	1,936 13 2		
Bellary		Do	Wood	..	240		13 6 9	13 6 9		
			Palmyra jaggery		Mds. 2		0 5 9	0 5 9		
			Tangedu bark		90		25 0 4	25 0 4		
			Total				38 12 10	38 12 10		
Anantapur.		Do.	Margosa tree	1	20		1 11 0	1 11 0		
			Timber		42		8 3 7	8 3 7		...
			Firewood		220		8 13 6	8 13 6		
			Grass		Mds. 10		0 5 8	0 5 8		
			Tangedu bark *		,, 630		860 0 0	860 0 0		
			Aloe fibre		,, 3		0 8 6	0 8 6		
			Tamarind fruit		,, 2		0 2 0	0 2 0		
			Total				879 12 3	879 12 3		
Nilgiris.	Coonoor	Do.	Rafters		15	Auction.	0 11 6	0 11 6		
	Do		Fuel		114		6 7 0	6 7 0		
	Ootacamund		Do				1 14 6	1 14 6		
	Melur		Do.				0 7 0	0 7 0		
			Total				9 8 0	9 8 0		
			Grand Total				12,646 6 10	12,531 6 10		
			Total Sold from depot.				42 758 6 2	42,713 9 1		
			,, locally				57,078 14 6	55,635 0 8		
			,, drift and confiscated.				12,546 6 10	12,531 6 10		
			Grand Total				1,12,383 11 6	1,10,880 0 7		

Add—Outstandings due from previous year as per form No 66	Total		Abstract of amount realized.
	Total		I (*a*)
Deduct—Amount realized during the year			I (*b*)
			I (*c*)
			I (*d*)
			I (*e*)
			III
Balance outstanding on 188 as per form No. 66			Total

* 14 cart loads.

Annual Form No. 72.

Forest Department, Madras, Northern Circle.

Timber and other produce cut, collected, and removed from the forests by consumers or purchasers, including pasture, during the year 1888-89.

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
		C. FT.	Rs.	Rs.	
Ganjam ...	Timber	44,326	469	469	
	Auction sales	...	38	38	
	Total, Timber ...	44,326	507	507	II (*a*).
	Firewood	974,693	10,168	9,893	
	Charcoal	45,170	335	298	1 c. ft. = 10 c. ft. firewood.
	Total, Firewood and Charcoal ...	1,019,863	10,503	10,191	II (*b*).
	Bamboos	1,157,538	2,662	2,659	6 = 1 head-load.
	Total, Bamboos ...	1,157,538	2,662	2,659	II (*c*).
	Sale of tope proceeds ...	...	777	777	
	Total, Minor Produce ...	...	777	777	II (*e*).
	Grand Total ...	...	14,449	14,134	
Vizagapatam.	Timber	36,212	952	952	
	Palmyra tree	1	1	1	
	Miscellaneous	...	18	18	
	Total, Timber ...	36,213	971	971	II (*a*).
	Firewood	176,740	2,213	2,213	
	Charcoal	105,320	658	658	1 c. ft. charcoal = 10 c. ft. firewood.
	Dead-wood, miscellaneous	...	1	1	
	Ash	...	48	48	Head-load 781.
	Total, Firewood and Charcoal ...	282,060	2,920	2,920	II (*b*)
	Bamboos	227,982	2,145	2,145	
	Total, Bamboos ...	227,982	2,145	2,145	II (*c*).
	Grazing dues	...	17	17	
	Fodder grass	...	3	3	
	Total, Grazing and Fodder Grass ...	...	20	20	II (*d*).
		MDS.			
	Tangedu bark	1,599	54	54	
	Palmyra leaves	34	4	4	15 head-loads at 1 head-load = 2¼ mds. Re. 1 by auction.
	Produce of trees on asalminha lands...	...	78	78	
	Canes	8	2	2	
	Rough stone	4,480	6	6	
	Sales of fruits	...	408	408	
	Total, Minor Produce ...	6,121	552	552	II (*e*).
	Grand Total ...	...	6,608	6,608	
Godávari ...		C. FT.			
	Timber { Class I	19,694	3,693	3,693	
	Timber { Class II	77,034	9,629	9,629	
	Timber { Class III	46,277	4,126	4,126	
	Poles	137,118	17,142	17,142	
	Palmyra trees	270	44	44	27 trees.
	Babul trees	160	24	24	16 trees.
	Trees on darkhast, &c., lands ...	5,986	584	584	
	Total, Timber ...	286,539	35,242	35,242	II (*a*). Audited accounts give Rs. 34,755.

Timber and other produce cut, collected, and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
		C. FT.	RS.	RS.	
	Firewood	222,479	4,467	4,467	
	Dead trees on asalminha lands	42,916	1,446	1,446	
	Casuarina trees	80	7	7	8 trees.
	Firewood sold to Marine Department.	27,000	100	100	
	Charcoal	18,200	227	227	1 c. ft. = 10 c. ft. firewood.
	Total, Firewood and Charcoal	310,675	6,247	6,247	II (*b*). Audited accounts give Rs. 5,999.
		NO.			
	Bamboos	960,300	4,801	4,801	
	Bamboos	10,48,632	11,122	11,122	174,772 head-loads.
	Total, Bamboos	2,008,932	15,923	15,923	II (*c*). Audited accounts give Rs. 14,395.
	Grazing by lease	...	1,455	1,455	
		MDS.			
	Grass	145	1	1	65 head-loads.
	Total, Grazing	145	1,456	1,456	II (*d*).
		MDS.			
Godávari—*cont.*	Gallnuts	2,360	232	232	
	Soapnuts	1,383	138	138	
	Tamarind	53,349	3,335	3,335	
	Nux vomica	5,498	172	172	
	Cassia tora seed	176	14	14	
	Cashewnuts	10	1	1	
	Tangedu bark	5,244	509	509	
	Other barks	756	169	169	
	Vasantagunda	83	42	42	
	Broom grass	898	6	6	
	Reed mats	...	4	4	275 mats.
	Horns	49	42	42	
	Skins	110	28	28	
		MDS.			
	Musk	2	10	10	
	Wax	23	46	46	
	Honey	28	7	7	
	Iron	37	9	9	
	Stone	72,810	109	109	
	Gravel	20,250	14	14	
	Sale proceeds of usufruct trees on asalminha lands.	...	3,504	3,504	
	Amount less collected on (tangédu bark and recovered afterwards).	...	2	2	
	Total, Minor Produce	163,066	8,393	8,393	II (*e*).
	Grand Total	...	67,261	67,261	
		C. FT.			
	Timber	130,946	11,398	11,398	1,441 trees at 10 c. ft.
	Palmyra trees	14,410	3,603	3,603	
	Trees on darkhast lands	...	2,842	2,842	
	Other trees	...	6,219	6,219	
	Total, Timber	145,356	24,062	24,062	II (*a*).
	Firewood	570,882	8,325	8,325	
	Charcoal	10,500	132	132	1,052 head-loads at 1 c. ft. = 10 c. ft. firewood.
Kistna	Total, Firewood and Charcoal	581,382	8,457	8,457	II (*b*).
	Bamboos	168,570	1,851	1,851	6 bamboos per head-load.
	Total, Bamboos	168,570	1,851	1,851	II (*c*).
	Grazing	...	51,391	49,442	
	Total, Grazing	...	51,391	49,442	II (*d*).

Timber and other produce cut, collected, and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
		MDS.	RS.	RS.	
Kistna—*cont.*	Palmyra leaves	5,412	1,457	1,457	
	Stone	78,030	140	140	
	Fruit	...	4,676	4,676	
	Tangedu bark	...	2,204	2,204	
	Other minor produce	...	4,561	4,324	
	Total, Minor Produce ...	83,442	13,038	12,801	II (*e*).
	Grand Total ...	...	98,799	96,613	
		C. FT.			
Nellore ...	Palmyra trees 793	7,930	793	793	10 c. ft. per tree.
	Timber on permits	24,320	1,741	1,741	
	Sale of trees on asalminha and darkhast lands.	39,375	4,791	4,791	15 c. ft. per tree.
	Total, Timber ...	71,625	7,325	7,325	II (*a*).
	Firewood on permit	4,165	104	104	
	Sale of trees on asalminha and darkhast lands.	3,880	248	248	
	Total, Firewood ...	8,045	352	352	II (*b*).
	Grazing rents	...	14,769	14,769	
	Total, Grazing ...	...	14,769	14,769	II (*d*).
	Jungle product rent	...	500	500	
	Lease of mica mine	...	50	50	
	Lease of tangedu bark	...	3,451	3,451	
	Lease of palmyra leaves	...	328	328	
	Rents of topes, tree taxes and cheyroot collections.	...	841	841	
	Soapstone lease	...	60	60	
	Other minor produce	...	470	470	
	Total, Minor Produce ...	...	5,700	5,700	II (*e*).
	Grand Total ...	...	28,146	28,146	
		C. FT.			
Cuddapah ...	Red sanders posts	121	20	20	81 at 1½ c. ft.
	Red sanders wood	7,606	2,578	2,578	225 tons at 1 c. ft. = 75 lbs.
	Miscellaneous timber	168,360	13,353	13,353	+ 856 c. ft.
	Yepi roots	15	5	5	
	Miscellaneous trees	...	259	259	
	Palmyra trees	3,240	438	438	10 c. ft. per tree.
	Trees on darkhast lands	197,325	4,462	4,462	15 c. ft. per tree.
	Total, Timber ...	376,667	21,115	21,115	II (*a*).
	Firewood	692,692	17,272	17,270	
	Enginewood	583,678	19,340	19,340	
	Dead trees on village waste ...	858,175	2,145	2,145	
	Charcoal	130,080	1,650	1,650	
	Total, Firewood and Charcoal ...	2,264,625	40,407	40,405	II (*b*).
		NO.			
	Bamboos	842,376	8,318	8,318	
	Total, Bamboos ...	842,376	8,318	8,318	II (*c*).
		MDS.			
	Grass	27,000	339	293	300 tons.
	Grazing	...	1,725	1,725	15,445 head.
	Total, Grazing and Fodder Grass ...	27,000	2,064	2,018	II (*d*).

Timber and other produce cut, collected, and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue	Amount actually realized during the year.	Remarks.
		MDS.	RS.	RS.	
Cuddapah—*cont.*	Tangédu bark	29,665	3,107	3,107	
	Thumma bark	6,760	180	180	
	Miscellaneous	838	59	59	
	Bat's dung	2,790	70	70	
	Thatch grass	6,548	46	46	72¾ tons.
	Thorns	...	2	2	Auction.
	Leaves for manure	20,385	162	162	
	Palmyra leaves	1,582	59	59	
	Creepers	225	2	2	
	Guava fruits	...	2	2	
	Cowdung	...	31	31	
	Stones and earth	25,020	47	47	
	Tree tax...	...	193	193	
	Aturoy	...	23,703	23,703	
	Miscellaneous forest produce ...	...	3,215	3,215.	
	Total, Minor Produce ...	93,813	30,878	30,878	II (*e*).
	Grand Total ...	...	1,02,782	102,734	
		Cart-loads.	C. FT.		
	Timber	19,472	389,440	39,199	
	Yepi trees	518	10,360		
	Palmyra trees	87	870		
	Total, Timber ...		400,670	39,199	39,199	II (*a*).
Kurnool ...	Firewood		319,820	6,247	6,247	
	Dead trees on darkhast lands ...		25,380	2,478	2,478	
	Charcoal		210,800	2,274	2,274	
	Sale of fuel to Southern Mahratta Railway.		817,600	20,441	20,441	
	Total, Firewood and Charcoal ...		1,373,600	31,440	31,440	II (*b*).
	Bamboos		11,141	18,387	18,387	
	Total, Bamboos ...		11,141	18,387	18,387	II (*c*).
	Grazing		...	6,232	6,232	
	Total, Grazing. ...		...	6,232	6,232	II (*d*).
			MDS.			
	Tangedu bark		111,960	3,732	3,732	
	Other minor produce		...	6,069	6,069	
	Total, Minor Produce ...		111,960	9,801	9,801	II (*e*).
	Grand Total ...		...	1,05,059	1,05,059	
			C. FT.			
Bellary ...	Timber		15,995	1,285	1,285	
	Palmyra trees 650		1,300	1,625	1,625	20 c. ft. per tree.
	Trees on darkhast lands		...	2,602	2,602	
	Total, Timber ...		17,295	5,512	5,512	II (*a*).
	Green firewood		425	21	21	
	Dry firewood		218,152	3,235	3,235	
	Dry firewood		...	489	489	Auction.
	Charcoal		85,920	1,074	1,074	
	Total, Firewood and Charcoal ...		304,497	4,819	4,819	II (*b*).
	Bamboos		5,274	59	59	6 bamboos per head-load.
	Total, Bamboos ...		5,274	59	59	II (*c*).
		Head-loads.	MDS.			
	Grass	11,408	25,353	178	178	
	Grazing		...	264	264	1,663 head.
	Total, Grazing and Fodder Grass...		25,353	442	442	II (*d*).

Timber and other produce cut, collected, and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity	Amount of revenue.	Amount actually realized during the year.	Remarks.
		MDS.	RS.	RS.	
Bellary—*cont.*	Tangedu	109,168	8,266	8,266	
	Soapstone	1,755	3	3	
	Red earth	3,645	3	3	
	Iron ore	8,955	25	25	
	Stone	1,904,490	5,290	5,290	
	Limestone	1,080	3	3	
	Maddi bark	5	1	1	
	Papadi bark	25	1	1	
	Leaves for manure	5,098	101	101	
	Palmyra leaves	1,000	20	20	20,000 leaves at 50 mds. per 1 rupee.
	Rent of fruit trees	...	11,635	11,635	
	Total, Minor Produce	2,035,221	25,348	25,348	II (*e*).
	Grand Total	...	36,180	36,180	
		C. FT.			
	Timber	21,336	1,425	1,425	
	Palmyra trees 230	2,300	575	575	10 c. ft. each.
	Margosa trees 32	640	125	125	20 c. ft. each.
	Trees on putta lands	...	1,207	1,207	
	Total, Timber	24,276	3,332	3,332	II (*a*).
	Firewood	60,497	1,022	1,022	
	Total, Firewood	60,497	1,022	1,022	II (*b*).
	Head-loads.	NO.			
	Bamboos 3,346	20,076	338	338	
	Total, Bamboos	20,076	338	338	II (*c*).
Anantapur	Grazing	...	926	926	6,779 head.
		MDS.			
	Grass	4,392	31	31	1 head-load = 2¼ mds.
	Total, Grazing and Fodder Grass	4,392	957	957	II (*d*).
	Tangedu	138,900	11,792	11,792	
	Instalments of tangedu contractor's payments.		5,198	5,198	
	Leaves for manure	226,494	1,575	1,575	
	Jolli contract	...	2,346	2,346	
	Amroy contract	...	2,103	2,103	
	Palmyra leaves	150	13	13	20 leaves per md.
	Rough stone	720	1	1	
	Fishing in reserved areas	...	18	18	
	Total, Minor Produce	366,264	23,046	23,046	II (*e*).
	Grand Total	...	28,695	28,695	
		C. FT.			
	Timber	39,294	3,855	3,855	
	Total, Timber	39,294	3,855	3,855	II (*a*).
	Firewood	43,158	2,670	2,670	
	Charcoal	1,130	28	28	1 c. ft. charcoal = 10 c. ft. firewood.
	Total, Firewood and Charcoal	44,288	2,698	2,698	II (*b*).
Nilgiris		NO.			
	Bamboos	230,543	2,907	2,907	
	Total, Bamboos	230,543	2,907	2,907	II (*c*).
	Grazing	...	1,614	1,614	16,627 head.
		MDS.			
	Grass	94,482	509	509	
	Total, Grazing and Fodder Grass	94,482	2,123	2,123	II (*d*).

Timber and other produce cut, collected, and removed from the forests, &c.—*cont.*

District.	Produce removed. Description.	Number or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
		MDS.	RS.	RS.	
Nilgiris—*cont.*	Canes	1,442	43	43	
	Reeds	736	19	19	
	Wild dates	2,768	40	40	
	Fibres	2,198	30	30	
	Creepers	3,955	54	54	
	Ferns	1,690	11	11	
	Thatch grass	6,552	48	48	
	Vembadam bark	2	1	1	
	Wild coffee	...	50	50	
	Manure	...	58	58	
	Stone and gravel	121,095	85	85	
	Total, Minor Produce ...	140,438	439	439	II (*e*).
	Grand Total ...	...	12,022	12,022	

ABSTRACT.

	C. FT.		
Timber	1,442,261	1,18,413	1,18,413
Fuel	6,249,532	1,02,548	1,02,234
	NO.		
Bamboos...	4,672,432	52,590	52,587
	MDS.		
Grass	151,572	1,061	1,015
Grazing	..	78,393	76,444
Tangedu bark (*Cassia auriculata*) ...	396,536	38,313	38,313
Amroy (fruit tree rents)	...	38,690	38,690
Jolli (babul pods)	...	2,346	2,346
Trees on village and darkhast lands ...	...	32,799	32,799
Stone	2,226,895	5,692	5,692
Miscellaneous (minor produce) ...	376,894	29,156	28,919
Total ...	...	5,00,001	* 4,97,452

* Audited accounts give a total of Rs. 4,95,189 due to a sum of Rs. 2,263 unaccounted for in the Godávari District. The difference is under inquiry.

ANNUAL FORM No. 73-A.

Forest Department, Madras, Northern Circle.

Abstract showing the value of timber and other produce at sale depôts, for the year 1888-89.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at end of the year.			Difference in value.		Remarks.
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
				Rs.			Rs.	Rs.	Rs.	
Ganjam ...	Sál logs	664	4,843	2,425	478	3,278	1,383	...	1,042	
	Do. sleepers	150	269	125	8,186	16,796	11,901	11,776	...	
	Do. scantlings	50	151	75	66	89	26	...	49	
	Do. poles	19	47	10	..	...	...	...	10	
	Do. rafters	174	196	80	263	171	90	10	...	
	Do. slabs	1,982	...	...	6,339	...	127	127	...	
	Piasál logs	10	97	50	6	49	22	...	28	
	Blackwood logs	1	3	2	3	28	9	7	...	
	Miscellaneous logs ...	306	4,085	1,640	231	2,979	621	...	1,019	
	Do. planks, &c.	2,475	93	30	27	14	1	...	29	
	Satinwood	...	...	..	36	357	158	158	...	
	Ebony	3	46	50	3	46	21	...	29	
	Firewood and charcoal ...	Tons 7	...	3	22½	1,575	10	7	...	
	Minor produce	Mds. 807	...	100	Mds. 40	...	5	...	95	
	Total ...	...	9,830	4,590	...	25,382	14,374	9,784	...	
Godávari...	Ironwood	1	15	11	...	...	...	...	11	
	Miscellaneous	3	29	19	...	...	..	...	19	
	Total ...	4	44	30	...	...	...	...	30	
Nellore ...	Casuarina pole	1	2	1	1	2	1	...	...	
	Firewood junglewood ...	331,499	32,232	5,660	799,865	55,440	9,691	4,031	...	
	Do. sulli bundles ...	489	652	92	68,906	91,875	8,613	8,521	...	
	Rattans do. ...	35	...	201	10	...	58	...	143	
	Sarsaparilla	Mds. 5	...	15	...	...	...	...	15	
	Total ...	...	32,886	5,969	...	147,317	18,363	12,394	...	
Cuddapah.	Redwood roots and stumps	Tons 387½	18,594	6,585	2,286	109,794	22,860	16,275	...	
	Thamba slabs	...	...	...	50	50	38	38	...	
	Gallnuts	Mds. 5,155	...	2,965	2,771	...	1,099	...	1,866	
	Total ...	...	18,594	9,550	...	1,09,844	23,997	14,447	...	
Kurnool ...	Gallnuts B	Mds. 1,530	...	191	...	...	...	...	191	
	Total ...	1,530	...	191	...	...	...	...	191	
Bellary ...	Fuel	Tons 11	550	60	Tons 34½	3,939	42	12	30	
	Kapila dye	lb. 20	...	9	...	...	...	...	9	
	Total ...	...	550	69	...	3,939	42	...	27	
Anantapur.	Palmyra	1	2	1	...	...	...	...	1	
	Minor produce	Mds. 1,898	...	2,271	174½	...	380	...	1,891	
	Total ...	...	2	2,272	174½	...	380	...	1,892	
Nilgiris ...	Acacia planks and rafters.	211	211	53	372	191	253	200	...	
	Drag poles	487	487	61	98	98	12	...	49	
	Firewood and charcoal ...	Tons 231	11,550	1,566	* 294	22,296	2,268	702	...	* 216 lots, 78 bags.
	Minor produce	...	...	...	22	...	14	14	...	
	Total ...	...	12,248	1,680	...	...	2,547	867	...	
	Grand Total ..	...	...	24,351	...	...	59,703	35,352	...	

Annual Form No. 73-B.

Forest Department, Madras, Northern Circle.

Abstract showing the value of Live Stock, Stores, Tools and Plant, for the year 1888-89.

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Direction ...	Surveying and other instruments	15	184	16	193	...	...	
	Furniture	75	945	78	980	...	...	
	Letter-weighing scales with weights.	2	108	2	108	...	...	
	Miscellaneous	3	39	4	52	...	...	
	Total ...	95	1,276	100	1,333	57	...	
Ganjam ...	Bungalow, head-quarters	1	1,669	1	1,500	...	...	Redistributed.
	Do. inspection ...	7	2,420	6	2,205	...	...	
	Range houses	...	...	3	2,265	...	...	
	Inspection huts ...	8	410	13	783	...	...	
	Guard's sheds	3	345	2	210	...	...	
	Tannahdar's sheds ...	...	...	1	20	...	...	
	Furniture	36	303	35	263	...	...	
	Tools	219	316	192	240	...	...	
	Surveying and other instruments	28	243	26	436	...	...	
	Miscellaneous	1	8	2	20	...	...	
	Total ...	303	5,714	281	7,942	2,228	...	
Vizagapatam.	Sheds	2	45	...	...	...	...	
	Tools	5	2	16	...	...	...	
	Surveying and other instruments	17	162	10	23	...	...	
	Furniture	25	228	20	97	...	...	
	Miscellaneous ...	...	...	1	12	...	...	
	Total ...	49	437	47	132	...	305	
Godávari ...	Inspection house ...	1	327	1	327	...	...	
	Sheds, office	...	...	1	27	...	...	
	Do. tannah	11	144	7	102	...	...	
	Do. guards	...	...	3	15	...	...	
	Surveying and other instruments	22	169	22	169	...	...	
	Tools	313	257	441	423	...	...	
	Furniture	55	496	55	496	...	...	
	Miscellaneous	62	83	71	393	...	...	
	Boat	1	1,500	1	1,500	...	...	
	Scales with tripods ...	3	413	3	413	...	...	
	Elephants	...	...	4	6,000	...	...	
	Total ...	468	3,389	609	9,865	6,476	...	
Kistna ...	Inspection bungalow ...	...	...	1	792	...	...	
	Surveying and other instruments	24	575	29	575	...	...	
	Tools	270	174	266	164	...	...	
	Furniture	20	215	34	298	...	...	
	Boats (Dingy)	2	280	3	2,280	...	...	
	Miscellaneous	10	33	...	...	...	...	
	Letter-weighing scales...	1	10	1	2	..	...	
	Total ...	327	1,287	334	4,111	2,824	...	
Nellore ...	Inspection bungalow ...	...	...	1	553	...	...	
	Tannah sheds	...	...	7	...	...	...	
	Cash safes	4	210	4	210	...	...	
	Scales and weights, sets.	7	744	7	744	...	...	
	Furniture	96	565	96	574	...	...	
	Boxes	19	30	19	30	...	...	
	Tools	457	360	413	342	...	...	

Abstract showing the value of Live Stock, Stores, Tools and Plant, for the year 1888-89—*cont.*

District.	Description of stock.	On hand at commencement of the year.		On hand at end of the year.		Difference in value.		Remarks.
		Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
			Rs.		Rs.	Rs.	Rs.	
Nellore—*cont.*	Surveying and other instruments	46	275	46	275	...	..	
	Boats	9	4,018	11	4,478	...	...	
	Tramway	3	15,574	8½	32,644	...	...	
	Miscellaneous	...	...	1	12	...	...	
	Total ..	641	21,776	613½	39,862	18,086	...	
Cuddapah ...	Inspection bungalow ...	5	16,711	5	10,400	...	...	
	Ranger's houses ...	5	2,454	7	3,368	...	...	
	Office house	1	200	1	190	...	...	
	Sheds, various	75	1,414	83	1,495	...	...	
	Surveying and other instruments	37	346	28	328	...	...	
	Tools	518	588	532	638	...	...	
	Furniture	69	645	68	526	...	...	
	Scales with weights ...	1	155	4	226	...	...	
	Total ...	711	22,513	728	17,171	...	5,342	
Kurnool ...	Bungalow, head-quarters	1	7,090	1	11,000	...	...	
	Do. inspection ...	19	7,447	15	4,919	...	...	
	Ranger's houses ...	4	1,476	3	490	...	...	
	Sheds	19	1,889	20	498	...	...	
	Furniture	30	162	34	190	...	...	
	Tools	376	724	612	1,065	...	...	
	Surveying and other instruments.	28	341	30	281	...	...	
	Cash chest	1	8	1	8	...	...	
	Scales with weights ...	1	50	1	20	...	...	
	Total ...	479	19,187	717	18,471	...	716	
Bellary ...	Ranger's house	1	460	...	...	...	...	
	Inspection shed ...	...	...	1	634	...	...	
	Surveying and other instruments.	24	188	23	142	...	...	
	Furniture	17	219	33	354	...	...	
	Tools	186	211	229	210	...	...	
	Scales with weights up to 500 lbs.	1	272	1	272	...	...	
	Total ...	229	1,350	287	1,612	262	...	
Anantapur ...	Head-quarters bungalow.	1	6,469	1	6,500	...	...	
	Inspection bungalow ...	1	500	...	...	...	...	Fallen down, is being rebuilt.
	Sheds	15	173	16	196	..	...	
	Surveying and other instruments	42	185	42	186	...	...	
	Furniture	35	357	47	397	...	...	
	Cash safe with padlock.	1	12	6	52	...	...	
	Tools	147	281	145	281	...	...	
	Scales with weights ...	...	...	5	375	...	...	
	Total ...	242	7,977	262	7,987	10	...	
Nilgiris ...	Inspection house ...	...	...	1	1,000	...	...	
	Range house	...	..	3	600	...	...	
	Sheds, various	36	3,662	43	2,550	...	...	
	Surveying and other instruments	35	341	35	278	...	...	
	Charcoal kiln	1	582	1	437	...	...	
	Furniture	42	534	45	483	...	...	
	Tools	756	1,718	767	1,327	...	...	
	Elephants	2	3,000	2	1,800	...	...	
	Do. calf	2	700	2	700	...	...	
	Miscellaneous.							
	Chains of elephants ...	8	240	8	180	...	...	
	Total ...	882	10,777	907	9,355	...	1,422	
	Grand Total ...	4,426	95,683	4,885½	1,17,841	22,158	...	

ANNUAL FORM No. 74.

Forest Department, Madras.

Statement of Elephants in Northern Circle during the year 1888-89.

PART I.

Elephants in possession of the Reporting Officers throughout the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of monthly keep including servants and food.		Remarks.
				RS. A. P.	
Godávari.	Bada moti guz	July 1888, purchase ...	Average per month.	52 10 6	
	Pown guz	Do. do. ...	Do. do. ...	52 10 6	
	Captain Gunning ...	Do. do. ...	Do. do. ...	52 10 6	
	Jung Bahadúr	Do. do. ...	Do. do. ...	52 10 6	Total expenditure Rs. 1,685 for 8 months.
Nílgiris ...	Lutchmi	January 1882 ...	Do. do. . .	54 3 2	
	Chinna Lutchmi ...	Do. ...	Do. do. ...	54 3 2	
	Mabu Baksh	January 1885 born ...	Do. do. ...	27 1 7	
	Akbar Baksh	February 1888 born ...	Do. do. . .	... ..	Total expenditure Rs. 1,626 for 12 months.

PART II.

Elephants received in the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.		Remarks.
				RS. A. P.	
Godávari.	Bada moti guz	Purchased in July 1888.	Average per month.	52 10 6	
	Pown guz	Do. do.	Do. do. ...	52 10 6	
	Captain Gunning ...	Do. do.	Do. do. ...	52 10 6	
	Jung Bahadúr	Do. do.	Do. do.	52 10 6	

PART III.

Elephants gone off the list during the year.

District.	Names.	When purchased or otherwise obtained by Government.	Cost of keep including servants and food.	How disposed of.
None.				

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Land Revenue), dated 3rd September 1889, Forest No. 444 :—

W. S. WHITESIDE, ESQ., C.S.

Read—the following letter from A. W. PEET, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 5th August 1889, No. 1349 :—

I have the honor to forward herewith the annual report (in print) on the Forest Administration of this Circle during 1888-89.

2. With reference to their reminders, I believe the Board reckon the 15th July as the date on which the report is due in their office (paragraph 235 of the Departmental Code); but that date was fixed at a time when the report went in in *manuscript*. Now that it is required in print, it is, I submit, necessary to allow at least another month to pass the report and its bulky appendices through the press, and I feel sure that a reference to the Board's own records and the Superintendent, Government Press, will justify the claim. I may add that the comparatively early submission of the present report is due to work having been done at very high pressure.

Read—the following letter from J. S. GAMBLE, Esq., Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 6th July 1889, No. 1301 :—

I have the honor to forward the annual Forest Administration Report for the Northern Circle for the year 1888-89.

Resolution—dated 3rd September 1889, Forest No. 441

The Board resolve to submit to Government their annual review of the work of the Forest Department during 1888-89, as given in the reports of the two Conservators.

2. The Board are glad to be able to report that the Conservators were able this year to submit their reports early in August in print.

3. The establishment for the Presidency consisted of the following officers :—

	Southern Circle.	Northern Circle.
Conservators	1	1
Deputy Conservators	7	1
Assistant Conservators	6	5
Sub-Assistant do.	7	6
Rangers	33	22
Foresters	77	48
Guards	396	348

4: The gross receipts of the department amounted to Rs. 15,15,006, and the expenditure to Rs. 12,16,674, leaving a balance of Rs. 2,98,332.

The Southern Circle during almost the whole year was in charge of Mr. Cherry and the Northern Circle in charge of Mr. Peet. The latter officer was, however, relieved by Mr. Gamble on the 7th January 1889, and that officer was in charge up to the close of the year. Mr. Gamble very clearly shows how undermanned is his staff in the Northern Circle, and the Southern Circle is not much better. The Board do not see necessity to make any further remark on the matter as the facts are well known to the Government. They only say that in their opinion a strong recruitment of the establishment in all grades is not only most advisable from an administrative point of view, but would also prove in a few years financially successful.

5. The following statement shows the changes in areas made in the different classes of forests under the control of the Forest Department. The Conservator of Forests, Northern Circle, has not given complete information as in former years :—

	Area on 31st March 1888.	Added.	Excluded.	Area on 31st March 1889.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
A Reserved Forest under Act V of 1882	3,027	451½	47½	3,431
Reserved Forests under other orders	..	23	..	23
B. Forest reserved under previous rules	1,012½	..	818½	194
C. Leased forests	198½	..	63	135½
D. Reserved lands	11,520½	720½	518½	11,722
E. Other Forests, Southern Circle	1,250	368	166	1,452
Do. Northern „ Unreserved lands	..	12,474	..	12,474
Total ..	17,008½	14,036½	1,613½	29,431½

In taking the total, the area given under Other Forests by Mr. Gamble has not been included, as that area is not taken into consideration in the Southern Circle, and both returns should be based on similar data. Mr. Gamble has, for the first time, entered an estimate of all the areas of unreserved land in his circle, excepting those lands appropriated as village site, channel and road porambokes, &c., as forests. But though under forest control, the Board do not consider that the area can be properly considered as forests and prefer the system followed in the Southern Circle, under which only that area which is recorded for reservation and over which, therefore, the Forest Department exercises some real control is included. The Board do not understand how Mr. Gamble has treated the area formerly entered in statement 59-B. He reports that all the areas formerly described in it now find a place in either form 59-A or 59-C. But the Board are unable to find several of the blocks mentioned in the form 59-B in last year's report in either of the above two statements. Several blocks were, for instance, given in Rékapalle taluk, Godávari district, in form 59-B, 1887-88; but in neither 59-A nor 59-C are any blocks entered for this taluk in the current year's report. So also as regards Proddatur taluk in Cuddapah. The Conservator is requested to report what has been done as regards the areas which have disappeared altogether from the statements.

6. The following statement shows the areas under each class of forest in the two circles at the close of the year :—

	Reserved forests.	Reserved lands.	Leased and other forests.
	SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle	654	6,424	135½
Southern do.	2,994	5,298	1,452

Taking the forests by districts, the following shows the area of reserved forests (including leased forests) and reserved lands in each district.

Northern Circle.	Reserved forests including leased forests.	Reserved lands.	Southern Circle.	Reserved forests excluding forests reserved under previous rules.	Reserved lands.
	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.
Ganjam	18	527	Chingleput	92	61
Vizagapatam	37	..	North Arcot	369	542
Godávari	11	704	South Arcot	94	189
Kistna	19	647	Salem	598	570
Kurnool	..	1,715½	Trichinopoly	136	100
Nellore	6	493	Tanjore	8	17
Cuddapah	350	1,672½	Coimbatore	685	1,851
Bellary	62½	314	Madura	327	236
Anantapur	13½	261	Tinnevelly	287	303
Nilgiris	272½	96	Malabar	157	451
			South Canara	47	978
Total	789½	6,424	Total	2,800	5,298

7. In the Northern Circle only 43½ square miles and in the Southern Circle 398 square miles of forest were added to the area of reserved forest during the year, but besides these areas the settlement of 3,199 square miles in the Northern Circle and of 1,189 in the Southern Circle was completed during the year; but the notifications under section 16 of the Act have not yet been published. The Government are aware of the reason why there is such delay between the final report of the settlement of a forest and the issue of the notification under the Act constituting it a forest reserve. The Forest Settlement-officers, though in almost all cases they have examined into the claims put forward at settlement with care and have done almost all their duties as Settlement-officers satisfactorily, have submitted their draft final notifications in a state which prevents their immediate publication. The boundaries are generally not sufficiently described, and there are often details as regards the forest on which more information is required by the Board before the papers can be submitted to Government. This necessitates the return of the papers to the Settlement-officers and consequent delay. Since, however, the Board's orders on the subject have been known, the reports have been submitted in a better and more complete form, and the Board hope that next year a great advance in the amount of settlement work actually completed will be reported. Since the end of March, the Board have examined one hundred and sixty-four settlement reports, and twenty-four notifications under section 16 have been issued, out of thirty-seven submitted by the Board to Government.

8. The following statement shows the state of progress at the close of the year under report:—

		Total under settlement.		Total finally notified.		Total settled and reported but not notified.		Total settled but not reported.		Settlement proceeding.	
			SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Northern Circle.	Ganjam	35	529½	3	18	9	144½	8	173½	15	193½
	Vizagapatam	1	14	1	14	..	..	..	..	..	..
	Godávari	47	715½	2	11	22	227	10	86	13	391½
	Kistna	54	660	10	19	26	198½	5	78½	13	364
	Nellore	120	477	7	5½	37	96½	29	99	47	275½
	Cuddapah	114	1,886½	21	350	42	956½	17	144½	34	435½
	Kurnool	14	1,715	..	..	7	1,410	2	20	5	285
	Bellary	51	314	..	..	14	29½	2	18½	35	266½
	Anantapur	48	275	5	13½	14	108	4	12½	20	141
	Nilgiris	172	295½	115	199½	52	28½	..	..	5	67½
	Total	651	6,882	164	631	223	3,198½	77	631½	187	2,420½
Southern Circle.	Chingleput	47	131	17	92	18	25	12	14	..	..
	North Arcot	86	733	38	369	45	314	2	50	..	..
	South Arcot	85	283	22	94	48	140	..	..	15	49
	Salem	106	966	66	598	22	166	18	212	..	..
	Trichinopoly	74	197	31	136	12	42	31	19	..	..
	Tanjore	24	19	16	8	4	11	4	..	..	..
	Coimbatore	20	1,342	15	685	1	..	..	..	4	657
	Madura	94	500	73	327	16	152	4	21	1	..
	Tinnevelly	39	589	5	287	34	302	..	..	..	..
	Malabar	34	560	12	157	..	..	7	143	15	260
	South Canara	22	144	13	47	5	47	3	47	1	3
	Total	630	5,464	308	2,800	205	1,189	81	506	36	969

9. The following is the statement in the form required by the Government of India :—

STATEMENT showing the progress of forest settlements for 1888-89, prescribed in paragraph 4 of Government of India letter in G.O., dated 22nd July 1881, No. 621, Revenue.

Circle.	Forest areas not as yet dealt with under the provisions of Chapter II, Act V, at the beginning of the year.	Areas gazetted under section 4 of Act V. not yet settled at the beginning of the year.	Areas gazetted under section 4 of Act V during the year.	Areas settled and gazetted under section 16 of Act V during the year.	Areas alienated in the course of settlement during the year.	Balance of areas gazetted under section 4 of Act V not yet settled at the end of the year.	Balance of forest areas not as yet dealt with under the provisions of Chapter II, Act V, at the end of the year.
1	2	3	4	5	6	7	8
	SQ. MLS.	SQ. MLS	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.
Northern Circle.	7,334½	6,158	136½	43½	..	6,251	6,582½
Southern ,,	6,647	2,323	739	398	..	2,664	6,944
Total ..	13,981½	8,481	875½	441½	...	8,915	13,526½

N B.—In column 2, the area entered is the area of reserved lands and other forests not yet dealt with under the Forest Act. The foot-note to the former by the Government of India was not understood and apparently was incorrect. This form has been prepared thus: —

Column 7 = columns (3 + 4) — column 5.
Column 8 = column 2 — decrease + increase, due to afforestation of unreserved lands, to rectification of areas, &c.

No entries have been made in column 6 as the areas alienated are very small and exact figures are not known.

10. The first of the above statements shows that, as far as actual settlement work in the field is concerned, the progress during the year was good. It is important that the final papers concerning the settlement of all the blocks should be complete and accurate in every respect, and the delay that is caused by their careful examination and correction will be well compensated by absence of trouble and difficulty in connection with boundaries and management in the future. The Board do not give the percentages of reserved forests to district areas, as the forest settlement is not yet in a sufficiently advanced state to show what the ultimate proportions will be in each district. The wishes of the Government upon the subject of reservation are well known, and Collectors are now considering further proposals to make the area under close reservation complete. In the Northern Circle, the completion of the settlement work in Kurnool has been retarded by the very confused way in which the adjudication on the various claims put forward was recorded. The settlement was carefully carried out; but the registers were prepared in a manner which made scrutiny in the Board's office difficult. The areas were very large and the claims numerous. In Nellore, the settlement work has been difficult; it has, however, so far as the papers before the Board show, been well carried out. In Anantapur, the want of a special Settlement-officer has been much felt. In Vizagapatam district, it is hoped that some arrangement for improving the control of the forests may be arrived at, when the Conservator visits the district in the next cold weather. In the Southern Circle, the Conservator reports that the following further areas are likely to be proposed for reservation :—

	SQ. MLS.		SQ. MLS.
Chingleput	36	Tanjore	39
South Arcot	463	Coimbatore	299
Salem	622	Tinnevelly	4
Trichinopoly	102	Malabar	35

The Board have proposals from Salem which they hope to dispose of shortly. The Southern Circle report gives much more complete information on the subject of the areas under forest control of different kinds than is contained in the report of the Northern Circle. The Board desire that in next year, the appendices which supply

the information regarding the various kinds of forests under the management of the department in the two circles shall be drawn up in similar forms. The Conservators should in consultation decide upon the best method of showing the necessary information. In this year the Northern Circle appendices are incomplete. The areas of all the above blocks must be taken as only approximate, and until they are completely surveyed no accurate statement can be given of the areas under forest control in either circle.

11. As regards village forests, Mr. Gamble gives information as to areas set apart for the purpose on the Nílgiris; in other districts, nothing has yet been done, and with the present strength of establishments nothing can be done in most districts until all the settlement work is completed.

12. *Demarcation.*—In the Northern Circle the Conservator gives a very full report on the amount and quality of work done in connection with demarcation. The demarcation of some 1,827¾ miles appears to have been done during the year, at a cost varying from Rs. 7-8-0 a mile in Nellore to Rs. 28 in Kistna. The work is reported to have been well done and, except in Kistna (Rs. 28) and Godávari (Rs. 27-12-0), the cost does not appear to have been too high. The total spent on demarcation was Rs. 23,058.

The Conservator has reported that the demarcation in Anantapur with which fault was found last year proves on inspection to have been well done, and not to have been really costly. In the Southern Circle 1,572 miles are reported to have been done at an average cost of Rs. 10-4-10 a mile. The total spent on demarcation during the year under report was Rs. 16,191.

The Board would deprecate any inferences being drawn from the large and comparatively heavy cost of the work done in the Northern Circle. The Southern Circle Conservator admits that the Superintendent of the Survey Party working in his circle has expressed his dissatisfaction with the demarcation work done there, and bad demarcation is one of the reasons given by him for the slow progress made with the survey. If the demarcation in the Northern Circle has been done thoroughly well, the Board do not think the cost extravagant. Whether it has been done well or not, time will show. Demarcation is obviously work the cost of which can be made as heavy or as light as is required. A few feet taken off the breadth of the line, careless supervision as to the quantity of brushwood left, a reduction in the size of the cairns put up, all these and many other factors may tend to reduce cost, and at the same time to make the work done ineffective and transitory in its result. With reference to the remark of the Northern Circle Conservator that in many forests the Board have recently directed alterations of boundary, which necessitated an increased cost in demarcation, the Board beg to state that they have directed an alteration of boundaries in those cases where, owing to the situation of enclosures in the forests, a slight deviation of the boundary line will throw the enclosures outside instead of inside the forest. It is important that the forest areas should, as far as possible, be free from all enclosures over which private rights exist.

The results of the year appear satisfactory. About 3,399 miles were added to the length of demarcated boundary, making the total length demarcated about 13,089 miles.

13. *Survey and working plans.*—In the Northern Circle, in Bellary, 14 blocks of forest, in area 14·6 square miles, were surveyed on the scale of 4 inches to 1 mile. The work was done by the Revenue Survey Department. In Ganjam, Godávari and Cuddapah some work was attempted by the local staff, but otherwise no survey work was carried out in the Northern Circle. Twelve working plans are in operation in the circle, in the districts of Nellore, Cuddapah, Bellary and Nílgiris. The working of the Nellore plantations on Mr. Vincent's plans appears to be profitable, the operations bringing in 5½ per cent. on an estimated capital expenditure of Rs. 2,96,000. In the Nílgiri forests, the working plans have not been rigidly adhered to. The cost of

surveys and the preparation of working plans was Rs. 1,613. This, however, does not apparently include the cost of the work done in Bellary by the Revenue Survey. Party.

In the Southern Circle the Government of India Survey Party was at work. The outturn appears to have been 169 square miles of reserved forests, and the triangulation and traversing, in advance of survey, of 1,000 and 240 square miles, respectively. The Deputy Superintendent in charge of the Party has, as above remarked, found the demarcation in many cases unsatisfactory. The work has been done in Tinnevelly, Madura and Salem and the cost was Rs. 39,337. The work done departmentally cost Rs. 5,861, and consisted of the survey of 170 square miles of forest in Salem, Trichinopoly and South Canara. Some work appears also to have been done in Tanjore. The Board doubt whether there is much good gained from these rough departmental surveys except in cases where the forests are small and the topographical features present no difficulty. The Government in last year's review directed these surveys to be discontinued unless they could be made more accurate. What arrangements have been made to make them so are not reported. The Conservator should, when he next visits South Canara, report specially on the value of the survey work done there. The preparation of working plans has not advanced more in the Southern Circle than in the Northern. The inability of the department in its present condition to devote much attention to this work has been constantly brought to notice. In most cases the working plans in operation could not be strictly followed owing to the destruction of trees by storms and defects in the original plans. In one block in South Coimbatore the felling results are reported to have been very satisfactory.

14. *Fire protection.*—The Conservator of Forests, Northern Circle, reports that the return in regard to fire protection has been very carefully scrutinized. Out of 1,667 square miles attempted, 14 per cent. was burnt. The cost was about Rs. 9 a square mile. In the Southern Circle 1,502 square miles were protected by fire tracings at the cost of Rs. 13 a square mile, and 97 per cent. was saved.

In Ganjam the dry season caused bad fires; in Kistna protection was successful; in Cuddapah the fires are reported to be the deliberate work of incendiaries, who manage so to prepare their work that before the existence of the fire is detected they are far from the scene of the offence. In Kurnool the jungle tribes long accustomed to annually burn large portion of the hills are not yet brought under control. In the Bellary leased forests valuable forest was burnt and there is reason to suppose that the fire lines were insufficient. On the north side of the Nilgiris, valuable tracts of jungle were destroyed, and in the Wynaad the fires by incendiarism were deplorable. The report of the Conservator of Forests, Southern Circle, shows that strenuous efforts were made there to save the jungles. The Conservator of Forests, Northern Circle, lays down the insufficient protection against fires first, to the weakness of district staff, secondly, to the heavy settlement and demarcation work which fully occupied the time of almost all the officers of the department, thirdly, to incendiarism, fourthly, to the length of the fire season. All these reasons no doubt have force. The insufficiency of the district staff is acknowledged, and no doubt in some places, probably in Cuddapah for instance, the increasing control exercised by the Forest-officers increases the antipathy of the herdsmen and others who suffer, and fires are the result. Fire lines are even when thoroughly laid down not always a sufficient protection in heavy jungle, in the dry districts; and the greater the efficiency of the fire protection in the past, the greater the difficulty of successful protection in the future until the growth of high jungle has destroyed the long grass which is the first result of protection. For all these above reasons the Board are not inclined to make the efficiency of fire protection at present an important test of the efficiency of the department. The Conservator of Forests, Northern Circle, fully explains how it is that the Bombay Forest Report shows such good results, and if the returns in this Presidency were drawn up on the same system, equally good results could be shown. The following statement shows by districts the areas attempted and the results reported:—

—	Districts.	Area attempted.	Area burnt.	Expenditure during the dry season of 1888-89.	Cost up to end of 1888-89.
		SQ. MLS.	SQ. MLS.	RS.	RS.
Northern Circle ..	Ganjam	489·4	32·9	671	3,353
	Vizagapatam	14	·04	..	..
	Godávari	144·1	25	298	396
	Kistna	68·5	·1	800	3,906
	Nellore	117·2	10·1	803	1,444
	Cuddapah	326·9	17·7	4,010	25,749
	Kurnool	34·5	11·4	840	3,595
	Bellary	103·0	17·5	2,336	13,044
	Anantapur	72·5	1·6	1,476	6,746
	Nilgiris	302·5	112·3	2,982	13,681
	Total	1,666·6	228·64	14,216	71,914
Southern Circle ..	Chingleput	36·4	·01	600	2,766
	North Arcot	604·7	3·9	2,261	15,712
	South Arcot	118·4	·8	652	5,075
	Salem	48·4	..	2,182	14,819
	Trichinopoly	77·3	·1	214	1,863
	Tanjore	..	..	..	..
	Coimbatore	76·6	·5	1,630	8,429
	Madura	303·8	1·1	4,765	23,433
	Tinnevelly	116 5	·8	3,916	11,687
	Malabar	95·7	44·4	3,097	14,941
	South Canara	24·2	·01	736	2,355
	Total ..	1,502·0	51·62	20,053	1,01,080

15 *Grazing.*—The following table shows the receipts from grazing in each district for a period of three years :—

—	Districts.	1886-87.	1887-88.	1888-89.
Southern Circle.	Chingleput	641	1,244	2,695
	North Arcot	1,423	30	3,318
	South Arcot	1,306	2,226	1,930
	Salem	24	..	5,257
	Trichinopoly	2,328	5,140	5,893
	Tanjore	414	593	751
	Coimbatore	27,707	34,633	20,677
	Madura	1,392	1,524	2,462
	Tinnevelly	313	609	312
	Malabar	117	27	101
	Canara	..	12	..
	Total ..	35,665	46,038	52,396
Northern Circle.	Ganjam	5	..	..
	Vizagapatam	..	..	20
	Godávari	971	947	1,456
	Kistna	37,927	38,711	49,442
	Nellore	4,683	12,784	14,769
	Cuddapah	174	1,227	2,018
	Kurnool	1,109	4,888	6,232
	Bellary	337	403	442
	Anantapur	6	16	957
	Nilgiris	326	797	2,123
	Total ..	45,538	59,773	77,459

On the whole, the reports show that the question of grazing received careful attention during the year. The Board think that there may be some reason to fear that from anxiety to show a good balance sheet district officers may be tempted to extend the privilege of grazing with too free a hand. They doubt whether it is advisable (as the Conservator says is proposed in Salem) to reduce rates and place no restriction on the numbers of cattle sent into reserved forests, excluding only those forests which are under special fire protection. In Salem, this would mean apparently the permission of almost free grazing over all the forest areas except 48·4 square miles. As the Conservator of Northern Circle remarks, the forests of this Presidency excepting those perhaps on the West Coast are all suffering from excessive grazing and bad

treatment and in almost all cases rest is their chief requirement. It is to be regretted that the Muchukota forest in Anantapur which contains valuable timber and seedlings should have been thrown open to grazing.

16. *Police.*—The prosecution in connection with forest offences and their disposal are compared in the following statement with the results of the previous year :—

—		Cases pending.	New cases in the year.	Convictions.		Acquittals.	
				Cases.	Persons.	Cases.	Persons.
1		2	3	4	5	6	7
Northern Circle..	1888-89	125	1,733	834	1,964	316	906
	1887-88	103	1,455	888	2,122	339	1,055
Southern Circle..	1887-88	173	2,201	860	1,827	334	1,235
	1888-89	156	1,644	791	1,646	230	925

—		Compounded.		Withdrawn.		Cases pending at the close of the year.
		Cases.	Persons.	Cases.	Persons	
		8	9	10	11	12
Northern Circle..	1888-89	427	985	*102	..	179
	1887-88	205	652	1	3	125
Southern Circle..	1888-89	897	2,269	76	226	207
	1887-88	581	1,575	25	159	173

* Not entered in the Conservator's return

The percentage of convictions to total cases disposed of was in the Northern Circle 79·9 and in the Southern Circle (excluding those cases reported to have been withdrawn) 84. The offences were almost all those of unauthorized felling and theft of wood. But in Salem and Cuddapah the percentage of offences against the grazing rules to total offences was considerable. In the Northern Circle 427 cases were compounded concerning 985 persons. The amount for which offences were compounded was Rs. 1,818. The number given in the body of the report, viz., 529, is not the number of cases compounded, but the number of cases for composition which occurred during the year. In the Southern Circle 897 cases were disposed of concerning 2,269 persons and Rs. 4,915 were received. The reports seem to show that the work of the department in this matter was fairly satisfactory. Mr. Gamble has reported that in his circle the procedure as regards compounding is not uniform. In Ganjam and the Northern districts, generally, the Forest-officer, on papers laid before him by the Range-officer, decides the amount to be received. In Kurnool, all cases are reported first to a Magistrate having jurisdiction and he, if he thinks the case one which should be compounded, informs the District Forest-officer, who arranges for compounding the offence. On the Nílgiris, it is reported that weak cases are usually compounded. The Conservators should bear in mind that the power of compounding is not intended and should not be used in cases where the evidence is not strong enough to secure a conviction. It is intended to meet those cases where the offence is clear but of such a nature that it is not considered advisable to place the defendant on his trial. The place of the offence may be so far from a Magistrate's Court that it may be unduly hard to compel appearance before a Criminal Court or the offence may be of such a character that a warning is sufficient.

17. *Natural reproduction.*—The reports of the Conservators on the subject are interesting. Mr. Gamble, who, from a period of absence, is better able now to judge on the results of the conservancy in the dry districts of Cuddapah and Bellary reports that natural production in those districts is doing a great deal already. He has been

much struck by the progress made. The Conservator of the Southern Circle draws attention to the rapid reproduction taking place in most of the districts and to the curious result of felling in the Sholakarai block in Coimbatore where the seedlings largely consist of teak and rosewood, valuable trees, the latter of which hardly occurs in the forest in a full grown condition. The experiments of coppicing casuarina should continue to be made. Attention is drawn to Mr. Gamble's note to the effect that, to be successful, side shade is required and that therefore plantations should not be coppiced throughout at one time, but the trees taken here and there. Mr. Gamble has not reported whether the seedlings (*Hardwickia binata*) in the Anantapur forests are making any better growth than was formerly the case. From the fact that grazing was allowed in the forests there to a large extent lately, the Board fear that none or little progress can have been made.

18. *Artificial reproduction.*—The amount spent on plantation of topes and cultural operations with the area is given below :—

—		Area.	Cost during the year.	—		Area.	Cost during the year.
		ACS.	RS.			ACS.	RS.
Southern Circle ..	Plantation	11,792	25,532	Northern Circle		7,144½	14,208
	Topes	18,898	5,189			6,865	2,215
	Other areas	3,846	2,093			774	1,511
	Total ..	34,536	32,814		Total ..	14,783½	17,934

The total amount expended was Rs. 50,748 compared with an expenditure of Rs. 49,439 in the previous year. The total area under plantation, topes and other areas was 49,319½ acres compared with 55,947 acres in the previous year. The reduction in area is accounted for by the reduction in the area of topes in the Northern Circle, in Cuddapah, due to the exclusion of areas containing scattered trees formerly classified as topes. Mr. Gamble gives a very careful account of the operations in his circle during the year and considers that upon the whole the work was satisfactory. The mahogany plantations at the foot of the Nílgiris and the scattered mahogany trees in Nellore are reported to have done well. Mr. Gamble recommends that the replanting in the Nellore casuarina plantation should in part, at all events, be with broad-leaved trees instead of casuarinas. By this means he hopes to avoid the ill results which have attended the replanting of casuarinas. The experiment should be carefully watched. It is to be regretted that the district authorities in Kistna did not carry out the works recommended on the Bezváda hill. The works of improvement in the shape of the clearing of creepers and under-growth from the forests is reported to have been badly done in Bellary and well done on the Nílgiris. This result is not to be wondered at, the Nílgiris being under the immediate supervision of the Conservator, while in Bellary the supervising staff was very weak throughout the year. In the South Circle the operations for artificial reproductions were in many cases not successful. In South Arcot the replanting of casuarina was carelessly done, in North Arcot the plants from seeds sown some five or six years ago are reported to be stunted. In Malabar the teak continued to make good growth, but mahogany was not so successful. The climate may be too wet there to suit the plants.

19. *Exotics.*—The reports on the progress of the date palm cultivation continue to be good. The plant will thrive almost everywhere apparently if looked after. As yet, however, the only plants that have apparently borne fruit are four in Tanjore. The experiments with the Eucalyptus seed sent out from the Settlement Department (Board's Proceedings, dated 24th September 1888, No. 524) are reported to have resulted in failure in almost all cases. In the Southern Circle, Palmanér seems to be the only place on the plains where this tree will grow, and there four or five of the species seem to do well. The *Eucalyptus globulus* is 40 feet high. The Conservator, Northern Circle, deprecates the Forest Department undertaking experiments of the kind. But as long as too much time and attention is not given to this kind of work,

the Board see no harm in experiments being made, and one good result will compensate for many failures. They agree with Mr. Gamble, however, in thinking that the real aims of the Forest Department must not be lost sight of, and they look to the Conservator to see that too much time and attention are not given to operations which do not really form part of the Forest-officers' duties proper. In any case, the distribution of seed to Forest-officers should be always done through the Conservators. The Conservator reports that *Bucklandia populnea* grows well on the Nílgiris and *Acrocarpus fraxinifolius* in Anantapur and Cuddapah. In the Southern Circle the experiments with various kinds of bamboo in the Wynaad were successful. The Mahogany experiments were much interfered with by the borer and moth. Mr. Gamble has reported that the borer has disappeared in the plantations on the Nílgiris, it is said, through the application of kerosine oil and soap. The rubber plants on the West Coast flourish, but as regards the production of rubber the experiment has not yet been successful. It seems probable that the trees must reach a great age before they are fit to be tapped.

20. *Buildings and Roads.*—The amounts spent were as follows :—

	Northern Circle.		Southern Circle.	
	Actual expenditure.	Revised estimate.	Actual expenditure.	Revised estimate.
	Rs.	Rs.	Rs.	Rs.
Roads	9,234	12,000	16,345	15,080
Buildings	14,457	15,050	18,699	18,897
Other works	302	400	804	978
Total ..	23,993	27,450	35,848	34,955

The Conservator, Northern Circle, reports that Rs. 774 and Rs. 2,490 were spent, on 3½ and 29 miles of road in Ganjam and Godávari respectively; the appendix however, shows an expenditure of Rs. 807 and Rs. 2,475 respectively. In Cuddapah 18 miles of road were made, in Kistna 8¼, on the Nílgiris 5¼. The tramway in Nellore carried 2,995 tons of wood at about 6 annas a ton. The cost by cart would have been Rs. 2-8-0. The Board agree with the Conservator in considering that very careful inquiry should be made before tramways are put up anywhere. He promises to pay attention to the subject in his tours. Good work was done in building houses in Ganjam, the Nílgiris and in Kurnool. The Board note that in next year the Conservator promises to give a list of all the Forest rest-houses. It is time this was done and a report made of the progress to date since the reorganization. In the South Circle good road work was done in Tinnevelly and North Arcot and several forest buildings were completed. The Conservator should in next year's report submit a list of houses similar to that promised by Mr. Gamble. The tramways in North Arcot carried 100 tons of firewood between October and January at the rate of 1½ annas a mile. The tramway in Coimbatore will form the subject of a special report when Mr. Peet forwards an account of the work done by the Engineer sent from Messrs. Fowler and Co., Calcutta. The line has been a very difficult one to lay. The Board request that, in next year, the Conservator will submit a special form to furnish information as to the value of the tramways in the following form, giving the information separately for each line :—

Number of miles in working order.	Initial cost.	Amount expended up to date in maintenance and repair.	Amount of timber carried during the year.	Rate per mile.	Total receipts during the year.	Total receipts up to date.

21. *Yield and Working.*—The felling operations in the Northern Circle were much larger during the year under report than in the previous year, 96,831 trees being felled compared with 44,952 in 1887-88. In the Southern Circle 4,438 trees were felled; this was exclusive of bamboos which are included in the Northern Circle and were 77,808 in number. The following statement gives the total yield of the year in both circles. The Board hope to submit the value of the bamboos and minor produce on the receipt of the information from the Conservators:—

—	Timber.	Fuel.	Bamboo.	Minor produce maunds of 25 lbs. each.
	CUB. FT.	CUB. FT.	NO.	
By Government agency—				
Southern Circle	165,977	511,935	19,521	30,433
Northern do.	260,441	868,460	78,268	10,252
By purchasers—				
Southern Circle	1,266,812	7,779,800	6,183,415	1,353,497
Northern do.	1,442,261	6,249,532	4,672,432	3,151,897
By free grants—				
Southern Circle	7,824	640	17,154	896
Northern do.	35,631	14,818	130,050	..
Total .. { Southern Circle ..	1,440,013	8,292,375	6,220,090	1,384,826
Total .. { Northern do. ..	1,738,333	7,132,810	4,880,750	3,162,149

In the Northern Circle the red sanders felled wood in Cuddapah was not sold, owing to the District Forest-officer having refused the tenders offered as being too low. The Board are unable to agree with the Conservator in his remarks on this subject. When, owing to the presence of large stocks of red sanders in the market, the selling price falls considerably, the Board are decidedly of opinion that it is inexpedient to force a still further supply of the wood upon an already overloaded market by accepting offers at unduly low rates simply in order to effect sales and make a show of revenue. The Board consider that at such times it is better to refrain from disposing of the stock in hand and to hold it over until the market price resumes its normal rate. There is, in the Board's opinion, no force in Mr. Gamble's contention that "it is better and more dignified for the Government to sell its produce yearly at the market rate rather than keep it back on account of a depression." The Government are in no way bound to dispose of a valuable commodity at a loss when there is no demand for it, and in refraining from forcing sales the same course is observed as would be followed by any prudent merchant. It is not a question of dignity at all. In Ganjam the sales were also short owing to a falling off in demand. The value of timber sold from depôts and from the forests and of drift and confiscated wood by Government agency was Rs. 30,878, and the price of timber was nearly $4\frac{1}{2}$ annas a cubic foot. The fuel sold in the same way realised Rs. 61,995. The greater portion of the revenue comes from the Nílgiris (Rs. 17,561) and Nellore (Rs. 41,853). The total revenue from bamboos in the same way was Rs. 1,702, sandalwood Rs. 6,965, minor produce Rs. 9,356. Comparing results with former years, there is not much to notice except that the sales of timber fell off. In the Southern Circle the timber collected by Government agency and disposed of realised Rs. 1,27,847, the fuel Rs. 42,707, bamboos Rs. 1,649, sandalwood Rs. 10,564, and minor produce Rs. 65,477. The working of the year appears to have been satisfactory under this head. The rates charged for collections were low and the prices realised good.

The main revenue came as usual from produce removed by purchasers; the amount in the Northern Circle was Rs. 4,95,189 and in the Southern Rs. 6,30,430. In the Northern Circle there was a considerable increase of revenue in Bellary and Anantapur (viz., Rs. 10,430) due to *Tangedu* bark sales (*Cassia auriculata*). The Conservator gives some interesting information showing that the demand for the bark may fall off owing to superiority for tanning purposes of other barks common in this country. The Conservator has been directed to make a special report on the tangedu shrub and its treatment in the Ceded districts and elsewhere. The total increase in the Northern Circle over the amount received in the previous year was Rs. 51,285.

The increase was under every head except minor produce. This was also the case in the Southern Circle where the revenue realized was Rs. 19,180 in excess of the revised estimate and Rs. 26,850 in excess of the previous year's revenue. The rates remain about the same showing that the people do not pay more for the produce bought.

22. *Financial.*—The following statement shows the financial results of the year :—

	Revenue.	Expenditure.	
		A.	B.
	Rs.	Rs.	Rs.
Southern Circle	8,98,086	4,08,269	3,33,863
Northern „	6,16,920	2,54,298	2,20,244
	15,15,006	6,62,567	5,54,107
		5,54,107	
		12,16,674	
Balance ...		2,98,332	

The balance amounted to Rs. 1,42,378 in the Northern Circle and Rs. 1,55,954 in the Southern. This result must be considered satisfactory.

In the Northern Circle the receipts exceeded the receipts of the previous year by Rs. 52,197. The increase is spread over almost every head except I (*a*) where there was decrease owing to absence of sales in Cuddapah. The increase in grazing fees was moderate and was spread over almost every district. The receipts were Rs. 18,920 in excess of the revised estimate.

In the Southern Circle the receipts were Rs. 21,086 in excess of the revised estimate and Rs. 87,889 in excess of the receipts of the previous year. The excess was distributed over almost all the heads of revenue, excepting II (*e*) minor produce where a reduction in the receipts occurred. In South Coimbatore there was a falling off in receipts under timber I (*a*) and minor produce. The gross receipts increased considerably in North Arcot under timber I (*a*), and grazing II (*d*). In Madura there was a great increase in the receipts from minor produce.

In the Northern Circle the expenditure exceeded the expenditure of the previous year by Rs. 20,748 and exceeded the revised estimate by only Rs. 742, which is satisfactory. The deficits occur in the Nilgiris, Vizagapatam and Ganjam, and are explained by the Conservator.

In the Southern Circle the expenditure exceeded the actuals of the previous year by Rs. 67,409, and was less than the revised estimate by Rs. 9,068, which is an improvement on past years. The large increase in expenditure is due to purchase of a tramway for South Coimbatore and to the charges for Forest survey work done by the Government of India Survey party. All the districts showed a balance in their favor except South Coimbatore which showed a deficit owing to large expenditure on tramways. The Board congratulate the Conservators on the improvement shown as regards the accuracy of the estimates drawn up in last year. They hope that the improvement will continue.

23. The conduct of the subordinates during the year appears to have been on the whole satisfactory, though, in the Southern Circle there were some cases of misconduct on the part of Rangers. The District officers appear to have worked very energetically and well, and the Board are glad that their efforts have produced satisfactory results. Many of the officers require experience and are in charge of districts far too heavy for them. The Board in such cases must look to the Collectors closely supervising the work of their District Forest-officers, which it is feared in some cases is not done. The question of amending the forms of the cash accounts of the Forest offices has lately been considered and the Government have recently passed orders directing that the inspection of Forest offices should be more frequent than has hitherto been the case. The Board consider such inspections will be of great value.

24. The reports have been drawn up with care. The report of the Southern Circle is full and the figures accurate. In the Northern Circle, the Board have found some small discrepancies. In paragraph 43, forty miles of demarcation work are

said to have been done on the Veligondas, but in last year's report the boundary was said to have been complete all but fifteen miles. The expenditure on roads and bridges is said in paragraph 120 to have been Rs. 774 in Ganjam ; it should apparently be Rs. 807 as per form 64. In paragraph 149, the figures relating to Ganjam do not tally with the figures in form 70. There are some discrepancies between the information given in form 59-A and that given in form 59-C. In forms 62 and 69 the information in one or two cases does not precisely tally with the information given regarding the same facts in the previous year's report. The report itself is full of interesting matter.

(True Copies and Extract.)

(Signed) M. HAMMICK,
Secretary.

To the Secretary to Government, Revenue Department,
with reports.
„ Conservator of Forests, Northern Circle.
„ „ Southern „
Copy to all Collectors, except Collector of Madras.
„ to the Examiner of Forest Accounts.

READ— the following Proceedings of the Board of Revenue (Land Revenue), dated 10th October 1889, Forest No. 956, Mis. :—

MR. W. S. WHITESIDE.

Read—the following letter from the Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated 12th September 1889, No. 1750 :—

I have the honor to enclose two statements showing outturn of timber, &c., revised in accordance with instructions contained in Board's Proceedings, dated 5th September 1889, Forest No. 831, Mis.

Read—also the following letter from the Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated 18th September 1889, No. 1729 :—

Referring to Board's Proceedings, Forest No. 831, Mis., of the 5th September 1889, I have the honor to submit, herewith, the revised statements of outturn for 1886-87, 1887-88 and 1888-89.

Resolution—dated 10th October 1889, Forest No. 956, Mis.

Submitted to Government, with reference to G.O., dated 28th August 1889, No. 5519, and paragraph 21 of Board's Proceedings, dated 3rd September 1889, Forest No. 444.

2. The quantity of timber and fuel in Vizagapatam for 1888-89 has not been corrected with reference to the Conservator's letter No. 1495, dated 19th August 1889, in Board's Proceedings, dated 14th September 1889, Forest No. 85, Routine.

3. The necessary corrections have been made in this office.

(True Copies and Extract.)

(Signed) M. HAMMICK,
Secretary.

To the Secretary to Government, Revenue Department,
with copy of Board's Proceedings, dated 14th September 1889,
Forest No. 85, Routine, and five statements in original.
Copy to the Conservator of Forests, Northern Circle.
„ „ „ Southern „

ENCLOSURES.

PROCEEDINGS of the Board of Revenue (Land Revenue), dated 14th September 1889, Forest No. 85, Routine.

MR. W. S. WHITESIDE.

Read—the following letter from the Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated 19th August 1839, No. 1495, and Reference thereon, dated 24th August 1889 :—

I have the honor to forward, for the information of the Board of Revenue, in continuation of my annual report for 1888-89, the return of free grants of the Northern division of Vizagapatam, only received to-day. It should be incorporated in appendix D, page 42, after "Ganjam," and the grand total of that return raised to 50,449 cubic feet—130,050 number—Rs. 7,985-9-6. The entries in the columns by free grants under "Vizagapatam" and "total" in the outturn statement given in paragraph 154 should now be altered to—

	Timber and fuel.	Total.	Bamboos.	Total.
Vizagapatam	27,680	348,860	83,550	312,706
Total	50,449	8,935,228	130,050	4,888,271

2. I regret much that I omitted to notice the non-submission of this return. I was under the impression that the appendix D prepared in my office was complete. I would venture to add to the remarks made in my paragraph 162 the suggestion that orders may be issued that free grants should, as in other districts, be only given in future by order of the Collector in his forest branch and not by Divisional officers direct.

The statement of free grants in the Northern division of the Vizagapatam district, received with the above, does not contain the information required for columns 2 to 6 of appendix *D* to the annual report. The Conservator of Forests, Northern Circle, is requested to furnish, as early as possible, a revised statement in the same form as appendix *D*.

Read—also the following letter from the Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated 28th August 1889, No. 1543 :—

With reference to Board's Forest Register No. 1343, of 24th August 1889, I have the honor to submit a revised statement of free grants for the North Vizagapatam district for 1888-89, as far as information is available, and to say that a reference to the Collector has been made for the information required for columns 4, 5 and 6.

Resolution—dated 14th September 1889, Forest No. 85, Routine.

Recorded, the corrections having been made in the copy of the report sent to Government.

(True Copies and Extract.)

(Signed) M. HAMMICK,
Secretary.

To the Conservator of Forests, Northern Circle.

1886-87.

Districts.	Outturn in Cubic Feet of Timber and Fuel.				Outturn of Minor Produce and Bamboos.			
	By Government agency.	By private purchasers.	By free grants.	Total.	By Government agency.	By private purchasers.	By free grants.	Total.
	C. FT.	C. FT.	C. FT.	C. FT.	RS.	RS.		RS.
Ganjam	37,815	953,980	..	991,795	123	3,891		4,014
Vizagapatam	30	116,040	90,000	206,070	..	1,099		1,099
Godávari	11,122	1,225,450	..	1,236,572	..	12,534		12,534
Kistna	1,670	2,019,540	..	2,021,210	..	15,009		15,009
Nellore	382,320	93,830	..	476,150	2,250	18,507		20,757
Cuddapah	95,700	2,039,900	9,250	2,144,850	178	42,546		42,724
Kurnool	250,677	791,940	..	1,042,617	..	15,991		15,991
Bellary	118,079	80,540	..	198,619	1,022	14,648		15,670
Anantapur	9,678	86,175	..	95,853	250	14,753		15,003
Nilgiris	348,631	119,920	..	468,551	10,020	2,585		12,605
Total ..	1,255,722	7,527,315	99,250	8,882,287	13,843	1,41,563	..	1,55,406

Information not fully available. Information not available.

1887-88.

Districts.	Outturn of Timber.				Outturn of Minor Produce and Bamboos.			
	By Government agency.	By private purchasers.	By free grants.	Total.	By Government agency.	By private purchasers.	By free grants.	Total.
	C. FT.	C. FT.	C. FT.	C. FT.	RS.	RS.	RS.	RS.
Ganjam	53,197	1,299,325	18,220	1,370,742	10	4,202	110	4,322
Vizagapatam	..	182,450	48,400	230,850	..	1,603	2,384	3,987
Godávari	28,875	702,100	1,120	732,095	..	24,329	..	24,329
Kistna	2,891	939,375	.	942,266	3	11,607	2,000	13,610
Nellore	369,429	90,750	8,440	468,619	2,607	22,111	..	24,718
Cuddapah	113,313	1,899,400	11,500	2,024,213	1,513	46,455	305	48,273
Kurnool	9,550	1,156,500	1,650	1,167,700	56	19,929	38	20,023
Bellary	58,125	195,325	675	254,425	2,155	15,943	..	18,098
Anantapur	512	91,475	..	91,987	439	15,001	..	15,440
Nilgiris	367,507	123,725	1,510	492,742	6,306	2,547	..	8,853
Total ..	1,003,699	6,680,425	91,515	7,775,639	13,089	1,63,727	4,837	1,81,653

1888-89.

Districts.	Outturn in Cubic Feet, Timber and Fuel.					Outturn in Minor Produce and Bamboos.				
	By Government agency.	By private purchasers.	By drift and confiscated.	By free grants.	Total.	By Government agency.	By private purchasers.	By drift and confiscated.	By free grants.	Total.
						RS.	RS.	RS.	RS.	RS.
Ganjam	241,829	1,064,189	293	9,460	1,315,771	8	3,436	6	51	3,501
Vizagapatam ..	144	318,273	2,,63	27,680	348,860	..	2,700	30	686	3,416
Godávari ..	4,869	597,214	17,869	558	620,510	..	24,317	31	..	24,348
Kistna	13,312	726,738	3,657	..	743,707	..	14,652	8	5,000	19,660
Nellore	237,291	79,670	280	3,900	321,141	4,186	5,700	..	..	9,886
Cuddapah ..	111,322	2,641,292	4,442	1,848	2,758,896	1,310	39,489	34	3	40,836
Kurnool	3,520	1,774,270	34,130	3,400	1,815,320	99	28,188	17	151	28,455
Bellary	95,737	321,792	240	480	418,249	1,670	25,585	25	..	27,280
Anantapur ..	2,015	84,773	282	1,947	99,017	228	23,415	861	..	24,504
Nilgiris	418,862	83,582	129	1,184	503,757	9,507	3,855	..	..	13,362
Total ..	1,128,901	7,691,793	64,085	50,449	8,935,228	17,008	1,71,337	1,012	5,891	1,95,248

Heads.	Timber.		Fuel.		Minor Produce including Bamboos.	
	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.
	C. FT.	C. FT.	C. FT.	C. FT.	RS.	RS.
By Government agency	(a) 249,920	(b) 138,360	(c) 493,760	376,880	34,974	37,244
By purchasers	(d)1,051,972	1,108,440	7,290,520	5,999,040	2,39,234	3,00,041
Free grants	(d) 7,134	50,360	400	4,520	110	2,590
Total ..	1,309,026	1,297,160	7,784,680	6,380,440	2,74,318	3,39,875

(a) Includes confiscated timber and also sandalwood.

N B.—Teak saplings which were merely returned in number in the annual report for 1886-87 have now been approximately converted into cubic feet.

(b) Includes sandalwood.

(c) Includes confiscated firewood and also saplings, poles, &c., sold as firewood and shown in numbers in the annual report for 1886-87, but now converted approximately into cubic feet.

(d) Actual quantity as ascertained from form No. 72 of annual report for 1886-87.

Note.—The figures for 1887-88 under "By purchasers" includes confiscated timber, &c.

Heads.	Timber including Sandalwood.		Fuel.		Minor Produce including Bamboos.	
	1887-88.	1888-89.	1887-88.	1888 89.	1887-88.	1888-89.
	C. FT.	C. FT.	C. FT.	C. FT.	RS.	RS.
By Government agency	138,360	(a) 165,977	376,880	511,935	37,244	67,126
,, purchasers	1,108,440	1,266,812	5,999,040	7,779,300	3,00,041	2,89,036
Free grants	50,360	7,824	4,520	640	2,590	319
Total ..	1,297,160	1,440,613	6,380,440	8,292,375	3,39,875	3,56,481

(a) Includes 623 cubic feet, being excess found on remeasurement of timber collected and taken to depôt in previous year.

ORDER—dated 13th December 1889, No. 989, Revenue.

Forest, No. 147.

The Administration reports of the two Conservators of Forests, together with the Board's review of them, were this year received by Government only eleven days after the date on which they are due. This is a great improvement and His Excellency in Council, while congratulating the Conservators and the Board on the success of their endeavours to ensure greater punctuality trusts that the serious delays of former years will not again be permitted to occur.

2. *Area of Forests.*—The extent of the various classes of forest under the control of the department and the changes that have taken place during the year are shown in the following table:—

Class of Forests.	Area on 31st March 1888		Added during the year.	Excluded during the year.	Difference.	Area on 31st March 1889.	Remarks.
	As given in the report for 1887-88.	As since corrected.					
Northern Circle.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	SQ. MS.	
A. Reserved forests under Act V,	625	589	* 44	2	+ 42	631	* From D. The area of lands transferred from D to A is shown in form No. 59-C to be 22,813 acres, but the areas were corrected on transfer and the correct total is 28,072 acres.
B. Reserved forests under previous orders.	769	..	..	..	..	..	
C. Leased forests	199	135	..	..	..	135	
D. Reserved lands	6,364	6,338·5	† 138	‡ 54·6	+ 83·4	6,422	† 138 from F. ‡ 43·8 to A and 10·8 to F.
E. Other forests	..	..	§ 23	..	+ 23	23	§ From F.
F. Unreserved forests and waste lands.	..	..	..	..	..	..	
Total ..	7,957	7,062·5	205	56·6	+ 148·4	7,211	
Southern Circle.							
A. Reserved forests under Act V.	2,373	2,396	(a) 375	..	+ 375	2,771	(a) 375 from D.
B. Reserved forests under previous orders,	244	244	..	(b) 50	— 50	194	(b) 50 to D.
C. Leased forests	46	46	..	..	..	46	
D. Reserved lands	5,136	5,130	(c) 526	(d) 375	+ 151	5,281	(c) 50 from B, 166 from E and 310 from F. (d) 375 to A.
E. Other forests	1,250	1,250	(e) 368	(f) 166	+ 202	1,452	(e) 368 from F. (f) 166 to D.
F. Unreserved forests and waste lands.	..	..	..	..	..	..	
Total ..	9,049	9,066	1,269	591	+ 678	9,744	
Grand Total ..	17,006	16,128·5	1,474	647·6	+ 826·4	16,955	

The above figures are taken from the statements given in form 59, which in the case of the Southern Circle are complete and fully explained. The area of leased forests in that circle should, however, in future, be shown under that head instead of being distributed among reserved forests and reserved lands. This error was corrected in the review of the report for 1887-88 and should not have been repeated. The statements relating to the Northern Circle are deficient in some respects and require further explanation. The Board has pointed out the necessity for this in the case of the forests formerly entered in statement 59-B, but there are several other points to which the attention of the Conservator should be drawn. According to statement 59-A, the area transferred from D to A is 28,072 acres, but the total of the corresponding entries in statement 59-C is only 22,818 acres. The difference is apparently due to rectification of areas, but this should have been clearly shown and the corrections should have been made in both statements so that they may be in agreement with each other. Again in statement 59-C the cause of the addition or exclusion of areas is in many cases not stated The Yellichetti dibba, Nachugunta, and Sorlagundi blocks in the Bandar range of the Kistna district, may be mentioned as instances. It has been assumed that in these and similar cases the changes are due to rectification of areas and not to actual addition or exclusion of lands. The extent of addition owing to this cause amounts to 28,231 acres and the total of the exclusions to 50,231 acres, the net result being decrease of 22,000 acres or 34·38 square miles.

The estimated area of unreserved lands in the Northern Circle has been omitted from the above table as the Government agrees with the Board that the whole of such lands cannot be considered to be under real control by the department.

The forests in the Agency tracts of Vizagapatam, which Mr. Gamble has entered in a subsidiary statement appended to form 59-A, should be shown under "E. Other forests."

The addition made to the area of reserved forests during the year was 14 square miles in the Northern and 375 square miles in the Southern Circle. The total (419 square miles) is considerably lower than the corresponding figures for 1886-87 (685 square miles) and 1887-88 (710 square miles). This result is unsatisfactory, but the matter will be noticed below under the head of settlement. The corrected area of forests of all kinds under the control of the department at the beginning of the year is 16,128 square miles against 17,006 square miles as given in the reports for 1887-88. During the year this extent was raised by more than 800 square miles and on the 31st March 1889 it stood at 16,955 square miles. The great difference between the original and the revised figures is chiefly due to the entire omission from the latter of the area shown under B in the Northern Circle. The probability that the entries under this head were erroneous was noticed by the Government in the Review of the Report for 1887-88.

3. The Acting Conservator of the Southern Circle has made an attempt to estimate the additions which may hereafter be made to the forest area, but until the detailed district reports are received, the Government cannot express any opinion on the accuracy of this forecast. These reports are at last beginning to reach Government and it may be hoped that in a short time the area to be brought under control in each district will be more or less finally determined.

4. *Settlement.*—The smallness of the addition made to the extent of reserved forests has been noticed above. The area notified under section 16 of the Act amounted to only 419 square miles, but in addition to this 3,199 square miles in the Northern Circle and 1,189 square miles in the Southern Circle were settled and reported upon and 1,138 square miles were settled, but for this area no reports had been received up to the close of the year. The Board ascribes the delay between the submission of report and the issue of the notification to the errors which are found in the draft notifications drawn up by the Settlement-officers, thus entailing their being detained a long time in the Board's office for correction. This was mainly due to the inadequacy of the establishment available for the examination of the settlement records; but this cause has now been removed and His Excellency in Council trusts that the large arrears will soon be disposed of. A special report on the state of the work in the Board's office on the 31st December next should be submitted to the Government before the 31st January 1890.

In paragraph 6 of his report, the Conservator, Southern Circle, gives the area finally settled and notified during 1888 89 as 398 square miles; but this is the net addition made to the area of reserved forests and 23 square miles of it are due to correction of areas. The area settled and notified is 375 square miles.

5. The attention of the Government of India will be invited to the apparent inaccuracy of the foot-note to the statement given in paragraph 4 of Sir E. C. Buck's letter of the 15th June 1889, No. 585-F. The following statement gives all necessary information:—

Circle.	Unreserved forest area, 1st April 1888.	Added during year (net).	Total.	Area notified under section 4, 1st April 1888.	Added during year.	Notified under section 16, during year.	Balance notified under section 4, but unsettled.	Total unreserved area on 31st March 1889.
1	2	3	4	5	6	7	8	9
Southern Circle	6,624	303	6,927	2,323	739	375	2,687	6,927
Northern ,, ...	6,330	115	6,445	6,158	138	44	6,252	6,445

Note.—Column 2 gives the area of all forests under the control of the department other than reserved and leased forests.

6. *Demarcation, Survey and Working Plans.*—The length of boundary demarcated during the year was slightly more than in 1887-88, but this advance is the net result of an increase in the Northern and a decrease in the Southern Circle.* Mr. Gamble has nowhere given the total length of line demarcated in his circle, and it is not clear how the Board's figure was obtained, as the work done in Ganjam is not completely stated and it is thus impossible to find the total by adding the figures for each district. The outturn in the Southern Circle is not satisfactory, and His Excellency in Council regrets to find that the survey officers complain of the badness of the work done in this circle in previous years. The total expenditure was Rs. 39,249, which gives an average rate per mile of Rs. 11-8-10. The rate in the Southern Circle was considerably higher than in 1887-88, but in the Northern Circle there was a decrease of about 24 per cent.† It is obvious that the cost of forest demarcation must vary greatly with the nature of each particular block, but the Government is of opinion that the rates in the Northern Circle are still too high, and desires that endeavours may be made to reduce them. The high cost in Kistna and Godávari is particularly noticeable. With reference to the remark of the Board that "demarcation is obviously work, the cost of which can be made as heavy or as light as is required," the Government would point out that the object of demarcation is to obtain a clearly defined boundary capable of being easily surveyed, and any work which goes beyond this is unnecessary. Stone-walls, for example, are not required for the purposes of demarcation, which must not be confused, as the Board and Mr. Gamble seem inclined to confuse it, with fencing; the latter may in itself be desirable, but it is in most cases a work which can wait, and except in special cases, time and money had better not be expended on it until the reserves are settled, demarcated and surveyed.

	1886-87.	1887-88.	1888-89.
	MS.	MS.	MS.
* Northern Circle .	1,003	1,645	1,828
Southern ,, ..	1,134	1,701	1,572
Total ..	2,137	3,346	3,400

	1887-88.	1888-89.
	Rs. A. P.	Rs. A. P.
† Northern Circle	16 8 9	12 9 9
Southern ,, ...	6 13 2	10 4 10

7. The information regarding the survey operations conducted by the Survey of India Party is not sufficiently full, and the Government desires that the Board will request the Deputy Superintendent to furnish a brief report showing the amount of work done and such details of cost as are available, together with a forecast of the outturn during the present year. Information is also required as to the manner in which the total expenditure is debited, and in this connection the Board's attention is invited to G.O., dated 27th November 1888, No. 831, Revenue. The Superintendent, Madras Survey, should submit a short report on the forest surveys carried out by his department, with particulars of cost so far as these can be obtained without difficulty.

As regards departmental surveys, the Government has nothing to add to the remarks made in the Review of the Report for 1887-88. Comparatively little work of this kind was attempted and the expenditure was small,* but unless the survey is accurate it is almost useless, and the money could be utilised more profitably in other ways.

	Rs.
* Northern Circle	1,013
Southern ,, ...	5,861

8. *Protection.*—The area under special fire-protection shows a satisfactory advance, accompanied by a reduction in the rate of expenditure † which fell to Rs. 10·8 per square mile. This is not a high rate, the average for all provinces, excluding Bombay, being Rs. 16 per square mile in 1886-87. The following table affords information regarding the rate in each district and the measure of success which attended the efforts to prevent fires :—

—	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.
	SQ. MS.	SQ. MS.	SQ. MS.	SQ MS.	SQ. MS.
† Northern Circle	720	728	1,168	1,320	1,667
Southern ,, ...	744	906	1,081	1,250	1,502
Total ..	1,464	1,634	2,249	2,570	3,169
	Rate per square mile.				
	RS.	RS.	RS.	RS.	RS.
Northern Circle	15	9·10	10·16	10·95	6·53
Southern ,, ...	15·33	12·67	15·54	16·57	13·35
Total ..	15·17	11·08	12·75	13·70	10·8

Northern Circle.

District.	Rate per sq. mile.	Percentage unsuccessful.
	Rs.	
Ganjam	1·37	6·72
Vizagapatam	?	0·33
Godávari	2·07	17 35
Kistna	11·67	0·16
Nellore	6·85	8·6
Cuddapah	12·49	5·52
Kurnool	21 35	33·07
Bellary	22·67	16 98
Anantapur	20·34	2·22
Nílgiris	9 86	37·11

Southern Circle.

District.	Rate per sq. mile.	Percentage unsuccessful.
	Rs.	
Chingleput	16·48	0·03
North Arcot	3·74	0·65
South Arcot	5·51	0·70
Salem	45 08	0·00
Trichinopoly	2 77	0·22
Tanjore	.	...
Coimbatore	21 28	0 71
Madura	15·68	0 35
Tinnevelly	33 61	0·67
Malabar	32·34	46 44
South Canara	80·30	0·04

The great variations in cost which this statement discloses indicate that further examination of the expenditure is required. The rate per square mile is higher in the Southern than in the Northern Circle, and operations were much more successful in the former than in the latter, the percentage of failures being 3 and 4 respectively. The Government is not prepared to say that the greater measure of success is due to the higher expenditure, but the matter is one which should engage the attention of the Conservator of the Northern Circle. The results for the Southern Circle were very satisfactory in every district except Malabar, and here the failure was in part due to neglect; in the Northern Circle the percentage burnt was high in Nílgiris, Kurnool, Godávari and Bellary.

—	1886-87.	1887-88.	1888-89.
‡ Northern Circle ..	1,234	1,455	1,733
Southern ,, ..	1,339	1,644	2,201
Total ..	2,573	3,099	3,934

9. There was again an increase in the number of forest offences reported during the year, ‡ but the Governor in Council is glad to notice that this was accompanied by a high percentage of convictions.§ This satisfactory proportion, however, is not found in the case of all districts and it would be well if the Board examined

	1887-88. PER CENT.	1888-89. PER CENT.
§ Northern Circle	76	80
Southern ,, ...	86	84
	81	82

the statistics more in detail and not merely by circles. The number of cases compounded shows a considerable advance * and the Government trusts that this method of dealing with infringements of the Forest laws may be extended in the case of offences of a petty nature. Separate orders will be issued on the subject of a uniform procedure, but His Excellency in Council desires to observe here that the remarks of the Board have his entire concurrence. The number of cases reported varied from 681 in Trichinopoly and 610 in Salem to 24 in the Nílgiris and 9 in Chingleput. Without detailed inquiries it is impossible to say whether the smaller numbers show better guarding or bad detection, but as settlement proceeds and forest operations become more concentrated it should be possible to prevent offences without much difficulty and His Excellency in Council hopes that the number of the breaches of the law will gradually diminish.

—	1886-87	1887-88.	1888-89.
Northern Circle ..	240	205	427
Southern ,, .	460	581	897
Total ..	700	786	1,324

10. *Grazing.*—The receipts from grazing fees increased from Rs. 1,05,811 to Rs. 1,29,855, but in spite of this increase it is evident from the reports that grazing is still allowed free over a large extent of forest lands while the fees which were charged were very moderate. The Governor in Council notices with approval the attempt which was made in North Arcot to induce the ryots to use hay and he desires that the progress of this experiment may be mentioned in the report for the current year. As has been frequently pointed out, the presence of cattle is antagonistic to good forestry, but if cattle owners can be induced to cut and remove the grass, the advantages to them will be even greater than if their animals are allowed to graze, while so far as experience goes, little, if any, harm is done to the forests. With reference to the remarks of the Board of Revenue on this subject, His Excellency in Council would observe that it is undesirable to impose restrictions on grazing too rapidly, and that many of the forests are more needed for pasture grounds than for the growth of forest.

11. *Reproduction.*—On the subject of *natural reproduction* the Government has nothing to add to the observations of the Board and the remarks made in the Review of the Report for 1887-88. The expenditure on *artificial reproduction* amounted to Rs. 32,814 in the Southern Circle and Rs. 17,934 in the Northern, against Rs. 29,968 and Rs. 19,634 respectively in 1887-88. The bulk of the expenditure was as usual on the teak plantations at Nilambúr and the blue-gum plantations on the Nílgiris.

12. *Exotics.*—The special appendices on the subject of experiments with exotics show that most favorable results have been obtained with the date-palm. The sowings of the seed of bazaar fruits were successful in the Southern Circle, but the only reference to seed of this description in Mr. Gamble's report is a statement that it did not germinate in Cuddapah. It has been conclusively proved that the *eucalyptus* cannot be grown in the plains except perhaps at an expenditure which is prohibitive. The mahogany did well in Chingleput and North and South Arcot and at the foot of the Nílgiris, but in the Wynaad the results were disappointing, and the District Forest-officer of Trichinopoly fears that that district is not suited to it. The experiments with giant bamboos were most encouraging.

13. *Communications and Buildings.*—The expenditure on roads, buildings and other works was Rs. 59,841, and there was not the great divergence between the actuals and the revised estimate that has occurred in previous years. The increase in the expenditure under this head † is matter for satisfaction, provided the money was well spent, as there remains much to be done in the way of making roads and building rest-houses. The tramway in Nellore continued to work successfully, and that newly laid in North Arcot gave most satisfactory results. The account which Mr. Peet gives of the difficulties met with in laying the seven miles of line obtained for South Coimbatore will be interesting and instructive to Forest officers of other districts.

	Rs.
† 1886-87	51,719
1887-88	54,854
1888-89	59,841

14. *Yield and Working.*—The following table gives particulars of the yield of the forests during the last three years :—

Northern Circle.

	1886-87.	1887-88.	1888-89.
	C. FT.	C. FT.	C. FT.
Timber and fuel	8,882,287	7,775,639	8,935,228
	RS.	RS.	RS.
Bamboos and minor produce ...	1,55,406	1,81,653	1,92,458

Southern Circle.

	C. FT.	C. FT.	C. FT.
Timber and fuel	9,093,706	7,677,600	9,732,988
	RS.	RS.	RS.
Bamboos and minor produce ...	2,74,318	3,39,875	3,56,481

The recovery made in 1888-89 gives ground for satisfaction, but it is observed that in the districts of Kistna, Godávari and Nellore there has been a steady decrease, and that this was especially high in the first-mentioned district. The statement for the Southern Circle does not give particulars of districts,* in that for the Northern Circle timber and fuel are not shown separately, while in the case of both circles, bamboos and other minor produce are lumped together. Again for the Southern Circle the figure given as the value of the minor produce is the sum of the receipts under I (*c*) and I (*e*) for Government agency, and under II (*c*) and II (*e*) for produce removed by private consumers, but this is not so in the case of the Northern Circle. In these respects the statements require amendment and explanation, but they are an improvement upon the statistics hitherto furnished.

—	1886-87.	1887-88.	1888-89.
	C. FT.	C. FT.	C. FT.
* Kistna	2,021,210	942,266	743,707
Godávari	1,236,572	732,095	620,510
Nellore	476,150	468,619	321,141

The bulk of the produce was removed by private agency, but considerable departmental work was done in the Northern Circle in respect of timber and fuel and in the Southern Circle in the case of minor produce :—

—	Northern Circle.		Southern Circle.	
	Government agency.	Private agency.	Government agency.	Private agency.
	C. FT.	C. FT.	C. FT.	C. FT.
1886-87	1,255,722	7,527,315	743,680	8,342,492
1887-88	1,003,699	6,680,425	515,240	7,107,480
1888-89	1,128,901	7,691,793	677,912	9,046,612
	Minor produce.			
	RS.	RS.	RS.	RS.
1886-87	13,843	1,41,563	34,974	2,39,234
1887-88	13,089	1,63,727	37,244	3,00,041
1888-89	17,008	1,71,337	67,126	2,89,036

The cost of extracting timber and firewood was higher in the Southern than in the Northern Circle ; the difference may possibly be due in part to different systems of account, and the figures which have been taken for the expenditure, include the cost of taking out charcoal so that the rates are not quite accurate. The matter, however, deserves attention and further inquiry should be made by the Board and Conservators. The table shows that there was improvement in both circles in the year to which the report relates :—

	1887-88. Cubic feet.	1888-89. Per rupee.
Northern Circle	15·00	15·33
Southern „	8·15	11·04

Again in the case of bamboos and minor produce the ratio between the charges and the value of the produce taken out was higher in the Southern than in the Northern Circle.* It is not possible to make the same detailed comparison for timber and other produce removed by private agency, but here also the cost of working seems to be lower in the Northern than in the Southern Circle, the percentages of total charges to receipts being 5·77 and 7·39 respectively.

	PER CENT.
* Northern Circle	29·89
Southern ,, ...	52·08

The value of the free grants made during the year was Rs. 9,366,† but this includes two items, amounting to Rs. 5,000, in Kistna, which seem to be mere estimates of doubtful accuracy.‡ The Board should call for further report regarding them.

	RS.
† Northern Circle	7,986
Southern ,, ...	1,380
Total ..	9,366

‡ *Vide* appendix D to Northern Circle Conservator's report

15. *Financial Results.*—The financial results of the year's working are very satisfactory, the surplus revenue being nearly three lakhs of rupees. In the following table the figures for 1888-89 are compared with those of the previous year:—

	Northern Circle.		Southern Circle.		Total.	
	1887-88.	1888-89.	1887-88.	1888-89.	1887-88.	1888-89.
	RS.	RS.	RS.	RS.	RS.	RS.
Receipts	5,64,723	6,16,920	8,10,197	8,98,086	13,74,920	15,15,006
Charges	4,53,794	4,74,542	6,74,723	7,42,132	11,28,517	12,16,674
Surplus	1,10,929	1,42,378	1,35,474	1,55,954	2,46,403	2,98,332
Percentage	+ 24	+ 30	+20	+ 21	+ 22	+ 24·5

The revised estimates framed by the Conservators and the Board and those adopted by the Government are given below:—

	Conservator.	Board.	Government.
	RS.	RS.	RS.
Northern Circle—			
Receipts	6,11,700	6,15,500	5,98,000
Charges	5,02,700	4,89,200	4,73,800
Southern Circle—			
Receipts.	9,35,000	9,35,000	8,77,000
Charges	8,30,000	8,11,000	7,51,200

In the Southern Circle there was a large increase in the amount of outstanding revenue which was at the end of the year Rs. 18,921, while in the Northern Circle it was only Rs. 3,810, the figures for the previous year being 10,000 and Rs. 3,732 respectively. The outstandings due to the department by contractors and disbursers were Rs. 11,624 in the Northern and Rs. 21,513 in the Southern Circle.

16. *General.*—The Government is glad to find that the Northern Circle report is more free from inaccuracies than in previous years, but there is still room for improvement, and it should be considered by both Conservators whether it is not possible to reduce the size of their reports or of the appendices. The Government doubts, for example, whether it is necessary to show every block and every tope in these forms, and is inclined to the opinion that an abstract with the district as the unit would answer all useful purposes.

17. In conclusion His Excellency in Council desires to express his appreciation of the good work done during the year. Although the superior staff was undoubtedly inadequate for the charge of so large an extent of forests, yet the area under control was increased by over 800 square miles and a larger proportion of it was put under special protection, while the outturn of both timber and minor produce made a considerable advance and the sales yielded a larger surplus revenue than has ever yet been obtained. The progress made with the notification of reserved forests was not so satisfactory as

could have been wished, but for this the Forest officers were not entirely responsible. Much of the delay in the Board's office arises from the careless way in which notifications are sent in by District Forest-officers requiring an immense amount of revision. Altogether the excellent results obtained show that the prospects of Forest administration in this Presidency are most hopeful; but a larger staff is imperatively necessary and there can be little doubt that an addition to the number of controlling officers would prove remunerative as well as advantageous to the forests.

(True Extract.)

(Signed) J. GROSE,
Ag. Secretary to Government.